CONSUMERS UNION reports

MATTRESSES—Buy With Care

APRIL 1938

★

WEST COAST CU
A New Regional Division

RADIO AERIALS
Test Results & Ratings

MATTRESSES: With
Ratings of Innersprings

CHAIN STORES
And Working Conditions

Electric RANGES
Comparisons of Seven

TUNA FISH: Test
Results on 138 Cans

HEATING PADS
Shock Hazard is High

★

CONSUMERS UNION
OF UNITED STATES

CONSUMERS UNION

Vol. 3, No. 4 — 2 — April, 1938

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CU's ratings of products are based on both quality and price. A product rated "Also Acceptable" may be of higher quality than one rated "Best Buy" but the "Best Buy" will normally give greater return per dollar. In most cases a product rated "Not Acceptable" is judged not worth buying at any price, because of inferior quality or because it is potentially harmful. Products rated "Not Acceptable" for more specific reasons are so noted.

Fascism—And Why We Write About It

AS WE announce elsewhere in this issue, Ernst Toller, the world-famous writer who was forced to leave Germany for his anti-fascist activities, will be one of the speakers at CU's annual meeting next month. He will speak on "The Consumer and Fascism." And even in these unhappy days there will doubtless be some CU members who will think that the subject of his speech is beyond the proper concern of CU.

Mr. Toller will make abundantly clear, with references to Nazi Germany, how very vitally fascism affects consumers. Meantime, we'd like to say a few words for CU.

We'd like to say right off that we can't think of anything more properly the concern of a consumer organization now than the alarming spread of fascism.

In Spain today the third fascist wall is being thrown up around democratic France. And the French government, coquetting with England's pro-Hitler, pro-Mussolini prime minister, either fails to see the wall or, seeing, measures badly the shadow that it throws. The Spanish government, elected only a few years ago by an overwhelming majority, is forced to waste its people in a war of invasion not of its making and not of its wanting. In Austria the spring has come in and the gayety that once greeted it has now been stopped altogether.

But the Mediterranean is bright with boats carrying steel and flesh to Franco. And the night air over France is thick with the sound of bombers making the run from Berlin to Burgos. Across the earth in China a thousand gutted villages streak the sky with fire.

Nor can there be much argument with the picture painted thus far. The main elements of it at least are so well known as to elicit agreement from almost anyone—the fascist included. He would object to our phrasing; but he would glory in the substance of it.

At this point, however, Consumer A has a question: "That's all well and good about fascism spreading," he says, "but how does that affect me as a consumer?"

And Consumer B has another: "You're talking about Europe and Asia," he says, "and it's too bad for them, but it can't happen here, so why worry?"

Consumers A and B are honest folk expressing honest opinions, but we think they're both dead wrong. To get our own honest opinion out in the open let's look at a few facts.

II

Fascism is the most expensive form of government in the world. Its own economists can't justify it. And last summer an official Nazi economist quit trying to. He recommended that henceforth Germany should simply count on going broke every twenty years, confiscate wealth to re-establish itself, and then do it all over again. He called this the "Theory of Planned Depression."

American consumers can draw their own conclusions about life in an economy built on depressions.

Fascism is expensive because it is expansive. The record of fascist aggression is proof enough that fascism stops at nothing to expand. Its inability to cope with fundamental internal problems and the lack of controls on its Fuehrers and Duces are the reasons.

The masses, Hitler once stated, should not think. But they do, and most particularly when wages follow a steady spiral down and food runs short. To divert their thinking—and, more important, to get new sources of materials and outside markets to counteract the shrinking internal market—Hitler seizes Austria, Mussolini swallows Ethiopia, and both move in on Spain.

These adventures cost money. They cost a terrific amount of money. But there must be more and more guns, so there must be less and less butter. Because of a declining standard of living at home the fascist state goes raiding. And the result is a further decline.

Who bears the burdens? Whose standard of living declines? We say the consumer and his standard.

We should like to point out further that the fascist rulers keep a sharp eye out to see that he doesn't do anything about the situation. Germany, for instance, used

(Continued on page 31)

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Tuna Fish

Test results on 138 cans of "white" and "light" meat

★

CU PRESENTS here the results of tests on 138 cans of tuna fish. There are two types on the market: white meat and light meat. And the terminology is as misleading as that used for olives, where "large" means medium-sized, and "colossal" means large. With tuna, the word "white" actually refers to light-colored fish, and "light" to fish which is darker in color. Most of the "white-meat" tuna is found off the coast of Japan; it is because this is often superior in quality to the "light-meat" tuna that the Japanese packs head the ratings.

Brands labeled "packed in Japan" had the four best scores, and it is not known how many of the other cans not so labeled were actually imported from Japan. Those who wish to avoid buying Japanese goods should buy white-meat tuna only if it is expressly labeled "packed in the United States."

CU's tests were made according to a grading system similar to the one used for grading canned fruits and vegetables. There are, however, no U. S. Government standards for fish products; this necessitated a special testing routine, which took into consideration —besides the usual requirements for net and drained weight—color, tenderness and texture, filling, absence of defects, and flavor.

In the absence of government standards, the usual grades A, B, and C have not been applied to the ratings. Instead, the tuna was divided into quality groups: under 70, Poor; 70 to 84, Fair; 85 and over, Good. As usual with canned goods, many cans of the same brand showed great variation in quality, indicating poor control in the canning processes.

Some of the tuna fish packed for the French and Italian trade is labeled "packed in olive oil." But much of the olive oil on the market is known to be adulterated, so that the label is not necessarily a guarantee that real olive oil has been used. In many brands, either no statement is made as to the nature of the oil or, generally, if a statement is made the oil is admitted to be cottonseed.

Can sizes for tuna have not yet been completely standardized, although the majority of the cans examined were No. ½, containing 7 ounces. A few deceptive 6½-oz. and 6-oz. cans were found. And for that matter, the 7-oz. can is in itself deceiving to the extent that consumers often assume they are getting half-pounds.

IN THE listings below, cost is given in terms both of cost per can and cost per ounce drained weight. The latter should be the actual basis of a comparison of prices of the various brands. The score given is the average of the samples graded.

Good Quality

(Score 85 and over)

Pacific (Nozaki Bros. & Co., Yokohama, Japan). 29c for 7 oz. 4.5c per oz. White meat. Score, 93.

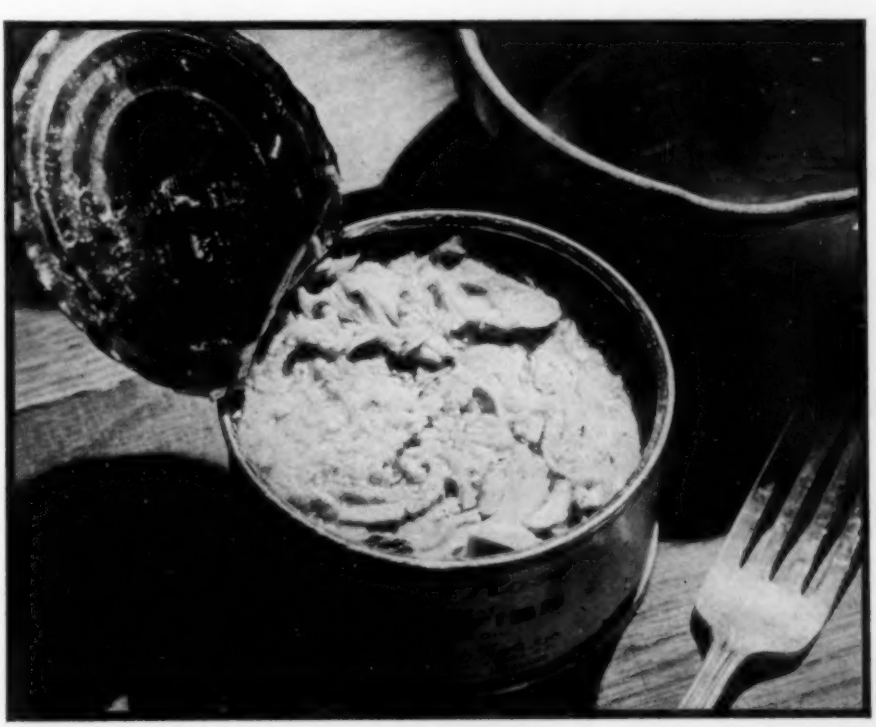
Geisha (Nozaki Bros.). 23c for 7 oz. 3.5c per oz. White meat. Score, 93.

Three Diamonds (Mitsubishi Shoji Kaisha, Tokyo). 23c for 7 oz. 3.8c per oz. White meat. Score, 91.

Monarch (Reid, Murdoch & Co., Chicago). 25c for 7 oz. 4c per oz. Labeled white meat but contained light. Packed in Japan. Score, 89.

Uco (Uco Food Corp., Newark, N. J.). 19c for 7 oz. 2.8c per oz. White meat. Score, 88.

White Rose White (Seeman Bros., Inc., NYC). 23c for 7 oz. 3.5c per oz. White meat. Score, 87.



ONE of 138

As usual, many cans of the same brand showed great variation

Curtis (Curtis Corp., Long Beach, Cal.). 22c for 7 oz. 3.5c per oz. Two cans of four tested found below labeled weight. Labeled white meat but three of the four cans contained light. Quality somewhat variable. Score, 86.

Del Monte (California Packing Corp., San Francisco). 18c for 7 oz. 2.9c per oz. Quality somewhat variable. Score, 86.

Royal Scarlet White (R. C. Williams & Co., Inc., NYC). 23c for 7 oz. 3.7c per oz. White meat. Quality somewhat variable. Packed in Japan. Score, 86.

Fair Quality

(Score 70 to 84)

A&P (A&P, NYC). 20c for 7 oz. 3.4c per oz. Quality somewhat variable. Score, 84.

Coral (Hawaiian Tuna Packers, Honolulu). 16c for 7 oz. 2.6c per oz. Quality somewhat variable. Score, 81.

Breast-O'-Chicken (Westgate Sea Products Co., San Diego, Cal.). 18c for 7 oz. 3.2c per oz. Quality variable. One can below required drained weight. Score, 81.

Mission (Van Camp Sea Food Co., Terminal Island, Cal.). 14c for 6 oz. 2.1c per oz. Note deceptive can size. Score, 80.

Red & White (Red & White Corp., Chicago). 22c for 7 oz. 3.7c per oz. Quality variable. Score, 80.

Richelieu (Sprague, Warner & Co., Chicago). 28c for 7 oz. 4.5c per oz. White meat. Packed in Japan. Score, 80.

Iris (Haas, Baruch & Co., Los Angeles). 20c for 7 oz. 3.2c per oz. One of two cans tested slack-filled, below labeled weight. Score, 80.

Krasdale White (A. Krasne, Inc., NYC). 23c for 7 oz. 3.7c per oz. Labeled white meat but contained light. Score, 80.

Blue & White (Red & White Corp.). 20c for 7 oz. 3.2c per oz. Score, 79.

Chicken Salad (Franco-Italian Packing Co., Terminal Island, Cal.). 17c for 7 oz. 2.8c per oz. Quality variable. Score, 79.

IGA (Independent Grocers Alliance, Chicago). 22c for 7 oz., 10c for 3½ oz. 3.4c per oz. Quality somewhat variable. Score, 78.

Crime & Punishment

The current *Notices of Judgement* of the Food and Drug Administration reports the seizure of 848 cases of tuna fish (*Blue and White* and *Chicken of the Sea*) packed by the Van Camp Sea Food Co. The charge: "adulterated . . . consisted wholly or in part of decomposed animal substance." The total penalty: an order to Van Camp to remove and do away with the offending fish.

S & W Light (Sussman, Wormser & Co., San Francisco). 20c for 7 oz. 3.4c per oz. Quality variable. Score, 78.

White Star (White Star Canning Co., Los Angeles). 19c for 7 oz. 2.3c per oz. Two cans of seven tested found slack-filled, below labeled weight. Three cans low on drained weight. Quality variable. Score, 77.

Co-op (Eastern Cooperative Wholesale, NYC). 17c for 7 oz. 2.8c per oz. Score, 77.

Macy's Lily White (R. H. Macy & Co., NYC). 24c for 7 oz. 3.6c per oz. Labeled white meat but contained light. Score, 76.

Royal Scarlet Light (R. C. Williams & Co., Inc.). 20c for 7 oz. 3.2c per oz. Score, 75.

S & W White (Sussman, Wormser). 29c for 7 oz. 4.7c per oz. One can found slack-filled, below labeled weight. Labeled white but contained very light meat. Score, 75.

Moro (Westgate Sea Products Co.). 16c for 7 oz. 2.5c per oz. Quality variable. Score, 74.

Sea Ace (Franco-Italian Packing Co., San Francisco). 19c for 7 oz. 2.9c per oz. Score, 74.

Sunset (Southern California Fish Corp., Los Angeles). 17c for 7 oz. 2.8c per oz. Score, 74.

Dellford (Middendorf & Rohrs, NYC). 20c for 7 oz. 3.2c per oz. Score, 74.

Chicken of the Sea, Blue Label (Van Camp Sea Food Co.). 17c for 7 oz. 2.7c per oz. Two cans of thirteen tested found slack-filled, below labeled weight. Quality most variable of those tested. Score, 73.

White Rose Light (Seeman Bros.). 19c for 7 oz. 3.2c per oz. Score, 70.

Poor Quality

(Under 70)

Sea Pride (Sea Pride Packing Corp., San Francisco). 15c for 7 oz. 2.5c per oz. Score, 69.

Sultana (A&P, NYC). 16c for 7 oz. 2.5c per oz. Two cans of ten tested found slack-filled, below labeled weight. Quality extremely variable. Score, 69.

Chicken of the Sea, Red Label, Fancy (Van Camp Sea Food Co.). 17c for 7 oz. 2.9c per oz. One can of seven tested found slack-filled, below labeled weight. Two cans low on drained weight. Quality variable. Score, 69.

Rival (Rival Foods, Inc., Cambridge, Mass.). 20c for 7 oz. 3.3c per oz. Score, 68.

Bonnie Best (Younglove Grocery Co., Tacoma, Wash.). 15c for 6 oz. 2.3c per oz. Note deceptive can size. Score, 67.

White Banner (Western Canners, Inc., Long Beach, Cal.). 15c for 6 oz. 2.3c per oz. Note deceptive can size. Score, 64.

Blue Banner (French Sardine Co., Terminal Island, Cal.). 23c for 7 oz. 3.5c per oz. Labeled white meat but contained light. Score, 64.

Krasdale Light (A. Krasne). 17c for 7 oz. 2.7c per oz. Score, 64.

Premier (F. H. Leggett & Co., NYC). 18c for 7 oz. 3.0c per oz. Score 63.

May Streamer (Shimizu Shokuhin Kaisha, Shimizu, Japan). 21c for 6½ oz. 3.2c per oz. Labeled white meat but contained light. Note deceptive can size. Score, 61.

Genova Tonno (Italian Food Products Co., Long Beach, Cal.). 12c for 3½ oz. 3.6c per oz. Score, 60.

Eatwell (French Sardine Co.). 19c for 7 oz. 3c per oz. Score, 60.

Daneri's Tonno (Daneri Bros., San Francisco). 23c for 7 oz. 3.7c per oz. One can of two tested found slack-filled, below labeled weight. Quality somewhat variable. Score, 59.

San Lucas (Van Camp Sea Food Co.). 14c for 7 oz. 2.3c per oz. Quality extremely variable. Score, 54.

Grand Union (Grand Union Co., NYC). 23c for 7 oz. 3.8c per oz. One can of two found slack-filled, below labeled weight. Score, 49.

CU Members Elect

. . . four directors to fill Board vacancies

THE terms of four members of the Board of Directors of Consumers Union expire with the Annual Membership Meeting to be held May 16 in Town Hall, New York City. Ballots for the election of directors to fill these vacancies were mailed during the early part of the month to all CU members. Results of the voting will be announced at the meeting.

In accordance with the By Laws of Consumers Union, the present Board of Directors, serving as a nominating committee, placed in nomination the first four names appearing below. These four were given the Board's endorsement, after consideration of numerous suggestions, on the grounds that they best satisfy the organization's needs and the requirements of service on the Board.

The second four names below were placed in nomination by individual CU members as provided in the By Laws of the organization.

Board Nominees

A. J. Isserman—(Nominated for re-election). Counsel, Consumers Union and Member of Executive Committee; Counsel, Bureau of Cooperative Medicine; Member of Board of Directors, American Civil Liberties Union; Member of National Executive Board, Lawyers Guild; labor and civil liberties attorney.

Dr. Charles A. Marlies—(Nominated for re-election). Licensed professional engineer; Assistant Professor of Chemical Engineering, College of the City of New York; Special Chemical Adviser and Member of Executive Committee of Consumers Union; President, Cooperative Health Association of New York.

Kathleen McInerny—Executive Secretary, League of Women Shoppers; formerly on staff of Women's Division of Democratic National Committee and in charge of Youth Activities in the 1936 campaign; also formerly a member of the staff of the Textile Workers Organizing Committee.

Bernard Reis—(Nominated for re-election). Certified Public Accountant; Treasurer of Consumers Union and Member of Executive Committee; author of "False Security" and of numerous magazine articles; Special Adviser to the Comptroller of the City of New York.

Membership Nominees

H. W. Cross—Professor of Economics and Director, Arts and Science Division, Springfield College; radio lecturer for State of Massachusetts; teacher of Economics, Bankers' Educational Association; lecturer on Consumers Cooperation.

Lily Turner Davin—Member of the Executive Board, League for Mutual Aid; Member of Newspaper Guild; Director, manuscript department, Federated Press.

Gertrude Houser—Staff of United Palestine Appeal; active trade-unionist.

Otto Steinbrocker, M.D.—Physician-in-chief, Arthritis Clinic, 4th Division, Bellevue Hospital, NYC; Instructor of Medicine, Columbia University.

HEYWOOD BROUN, a member of the Board since the beginning of CU, was not renominated because the pressure of his work as president of the American Newspaper Guild had made it impossible for him to continue as an active director. (It has been considered essential that CU be served by directors whose obligations and geographical location would not prevent active work on the Board.)

The Board expresses its gratitude to Mr. Broun for the work he has been able to do, and regrets his inability to continue.

CU Members Convene

. . . at second annual membership meeting

THE second annual membership meeting of Consumers Union will be held on Monday evening, May 16, at eight o'clock. The place: Town Hall, 113 West 43rd Street, New York City. Attendance at last year's meeting—nearly 1,000—indicates that the hall will be filled to capacity this year. And since admission tickets (free) are required, all members planning to come should notify the CU office at once, so that tickets can be sent them.

Paul J. Kern, president of the Civil Service Commission of New York City and a member of CU's board, will preside. Director Arthur Kallet and President Colston Warne will make reports. Alexander L. Crosby, labor editor of the *Reports*, will speak as representative of CU's staff. Results of the election of directors will be announced and resolutions submitted by members will be presented and voted on.

In addition, the meeting will make a significant contribution to consumer education with a special panel of five well-known speakers.

Ernst Toller, famous German playwright and anti-Nazi writer who was once president of the Bavarian Republic (he escaped from Germany the night of the Reichstag fire), will speak on "The Consumer and Fascism."

Michael Quill, onetime fighter in the Irish Republican Army, now American Labor Party member of the New York City Council and president of the Transport Workers Union, will discuss "The Consumer and Labor."

Congressman John M. Coffee of Washington, widely known for his work in behalf of progressive legislation, and sponsor of the Coffee food and drug bill, will talk on "The Consumer and Legislation."

Frank Palmer, editor of *Peoples Press* and eastern bureau manager of the Federated Press, will discuss "The Consumer and the Press."

Miss Mary Dublin, general secretary of the National Consumers League and a director of the League of Women Shoppers, will end the discussions with "The Consumer and Organization."

ELECTRIC
Heating Pads

Of ten tested, only three offered positive shock protection

★

THE convenience of electric heating pads is partly offset by the two hazards of burn and electric shock. Cost is relatively high, ranging from $2 to approximately $7.50 as against $1 for a good hot-water bottle. And the mechanism, employing a heating unit and two or more thermostats to control temperature of the pad, can get out of order. This, added to the fact that the rubber of even the best models is subject to deterioration, can have a decided effect on a heating pad's useful life.

Directions for operation usually do not point out clearly that the thermostats in electric heating pads are set for the same temperature, two or more being used in series to give additional protection. The result of this arrangement is that with a three-position switch the pad has, not three different operating temperatures, but three different *rates of heating;* if left covered it will eventually become just as hot on the low setting as it will on the high.

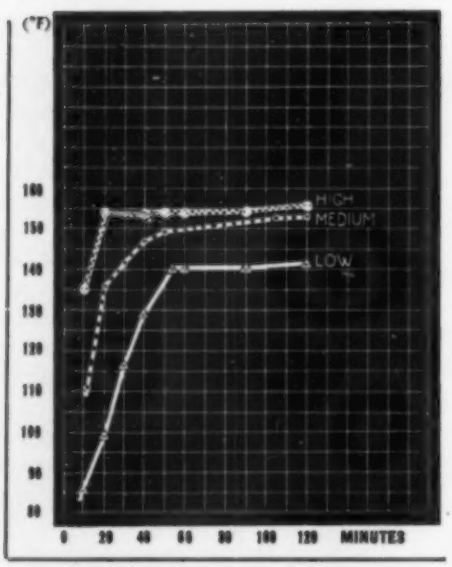
Of the pads tested, only the *Samson Wetproof* gave a lower average temperature on low than on high; it used the same thermostats for all heats but located them differently in respect to the heating element than the other pads tested.

Desirable temperatures are based on specifications prepared for the Association of Edison Illuminating Companies, which permit a maximum average temperature of 150° F. (66° C.) with no point on the pad more than 10° F. hotter.

Because of the construction commonly used, it is especially important not to leave a pad with an invalid or child and not to go to sleep with one turned on.

Only three pads were found to offer positive protection against electric shock, the *Safety-Heet*, *Electro-Sheet*, and *Samson Wetproof*. The first two were solid rubber, the third had a rubberized surface. All the pads with cloth surfaces were found on test to offer potentially serious shock hazard in normal operation even when not used with wet applications.

Under no conditions should cloth pads be used without rubberized covers (furnished with the better ones). Pads without such covers are "Not Acceptable" under any conditions. It is important in all cases to follow the directions supplied by the manufacturer.



SAMSON WETPROOF

Under test, low heat setting gave somewhat lower temperature than high or medium—true of no other pad examined.

Acceptable

(In order of quality, without regard to price)

Safety-Heet (made for United Drug Co., sold in drug stores). $7.50.

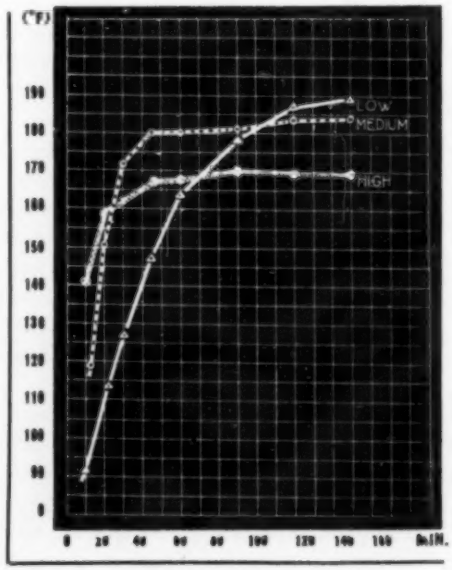
*Electro-Sheet** (Seamless Rubber Co., New Haven, Conn.). $7.50.

Except for surface design these two pads are apparently identical. All-rubber construction, with the heating elements molded into a rubber sheet. Well constructed. Test showed adequate protection against shock hazard. Reasonably satisfactory operating temperatures and adequate control of *rate* of heating. These pads should be discarded when the rubber cracks or splits; under such conditions they are no longer safe to use.

Samson Wetproof Model 520 (Samson-United Corp., Rochester, N. Y.; sold also as *Macy's Wetproof* #F5 by R. H. Macy, NYC). $3.95. Covered with rubberized cloth which afforded definite protection against shock hazard, although less than the all-rubber types; like them, it will deteriorate with age. Internal construction inferior in some respects, but the only pad tested in which lower temperatures were actually obtained on low-heat setting than on high and medium.

The following two cloth pads are acceptable only for use with rubberized envelopes. Even then they are less safe than the pads listed above.

Westinghouse WP 164 (Westinghouse Electric & Mfg. Co., Mansfield, Ohio). $5.95. Durable terry-cloth-surface pad, well constructed. Durability above average but high



UNIVERSAL

Tests showed that low heat setting gave highest final temperature. Temperatures reached on all settings were excessive.

* Available from Cooperative Distributors, Inc., 114 E. 16th St., NYC.

price justified only for heavy or continuous service. Note caution above.

Ward's Fireproof Cat. No.—5287, spring-summer '38. $3.75 plus postage. Less well built, and less durable than *Westinghouse*. Note caution above.

Not Acceptable

The first four are cloth type and showed excessive shock hazard when used without rubber covers:

GE Hotpoint Downy (General Electric Co.). $3.95. Excessive temperatures on all heats. Had removable rubberized cover.

Universal E 9846 (Landers, Frary & Clark). $3.95. Excessive temperatures on all heats. Had rubberized cover.

Mastercraft (chain drug stores). $1.98. No rubberized cover.

Moderne L-18 (Knapp-Monarch Co.). $1.98. No rubberized cover. Excessive temperatures on all heats.

Safe-T (Direct Sales Co., San Francisco). $1.50. Stiff varnished cardboard surface. *No thermostats.* Manufacturer claims that power rating of only 5 watts prevents overheating. But tests showed excessive temperatures under conditions of ordinary use.

The Sugar Subsidy

and what the consumer pays for it

THE Sugar Act of 1937 has no coating to make it palatable to the American consumer. And more accurately this piece of federal legislation for the benefit of growers should be described as the sugar tax. Although the half-cent tax on each pound of raw sugar may not seem burdensome in a single day's shopping, the tribute exacted from the public by the sugar industry for the year 1936 was about $350,000,000.

Thus each American citizen—to borrow a phrase from Congressman Voorhis—paid $3 into the sugar protection pot in a single year. It is easier to see what the tax means to a large share of the population when it is remembered that about two-fifths of all American families spend less than 9 cents a person for the food served at each meal. For many families, the sugar subsidy amounts to the total cost of meals for about a week and a half.

Just what is the sugar tax?

The present Act is the successor to the Jones-Costigan Act, which was lobbied through Congress by the sugar growers. Like its predecessor, the law has two features:

1. Quotas are established by the Secretary of Agriculture for the total supply of sugar to the United States and for the proportion which each sugar growing area may market.

2. A tax of one-half cent a pound is levied on all raw sugar marketed in the United States. Proceeds are paid to growers in the protected areas, which do not include Cuba. The growers are required to conform to their quotas, pay the minimum wage rates established by the Secretary of Agriculture, and use no child labor.

In 1936 it was estimated that the protected price of sugar was roughly two and one-half times greater than the world market price. Other agricultural producers, it is true, also receive government protection. But the sugar growers get double benefits: first from the sugar act, second from the soil conservation act. For example, the quota of the Florida-Louisiana growers is 431,000 tons. At the world price, this quota is worth $10,800,000. At the estimated domestic price, raw basis, the value is $27,600,000. The difference—$16,800,000—is what the sugar act brings, $5,200,000 representing benefit payments. But the same growers stand to collect an additional $1,000,000 under the soil conservation act.

Still dissatisfied with federal benefits paid by consumers, domestic sugar interests are now complaining that quotas are too large and prices therefore too low. It is to the credit of Secretary Wallace that he has thus far turned a deaf ear to the pleas for lower quotas. Recently he pointed out that the domestic industry receives a subsidy on raw sugar equivalent to about $8.40 for each ton of sugar beets—considerably more than the growers get for the beets actually produced! Hence, according to Mr. Wallace, "The public is providing sugar beet processors with free raw material and a substantial price subsidy in addition."

Pressure on Secretary Wallace from the sugar interests is, we understand, considerable. In their own interests, consumers should apply some pressure of their own. We urge CU members to write to Mr. Wallace, commending his stand, and supporting him in continuing it.

IF A fair share of the sugar growers' raid on the public's pocketbook were being returned to the laborers in the field it might be at least partly defended. Unfortunately, the act has not materially improved the workers' condition.

Complaints have been made to the National Labor Relations Board that laborers on Hawaiian plantations are held in a state "bordering on medieval servitude." On this continent, the annual income of the average family working in the beet fields is less than $400, excluding relief. Note that this is total family earnings. It has long been customary for all members of a family, children as well as adults, to go into the fields during the short working season.

A survey made by the Children's Bureau in 1935 showed that "9 per cent of the children 6 to 11 years of age and 50 per cent of those 12 and 13 years of age in sugar-beet laborers' families worked in the beet fields." About half of them were working 9 or more hours a day. Some reports indicate that the amount of child labor in the beet fields has increased since 1935.

Beet growers contract their work to laborers who are paid by the acre. Federal government reports show that the prevailing wage rates have increased during the 1935-1937 period of the sugar quota system by only $1 to $3.50 an acre. Since the average family handles less than 18 acres, it seems safe to estimate that the increase in annual family earnings has not exceeded $50 and probably runs a good deal less. Thus the high price that consumers are paying for sugar has not produced even the hope of a living wage for these exploited workers.

Workers in the Chain Stores

A survey of wages and working conditions in five 5-&-10's and three drug chains

WHEN the Department Store Employees Union (affiliated with the CIO) began to organize 5-and-10 cent store employees, some of the store managers brought the union question down to a strictly personal basis. "You wouldn't do this to me," pleaded one. Another got down on his knees and cried. Other managers merely dropped pointed remarks without any mention of the union.

A number of the girls, knowing little about organized labor, found it hard to make a decision. And in the hours after a strenuous and mentally dulling day's work, it was not easy to think the matter through in the clearest fashion. Nevertheless, thousands of sales girls signed up in the hope of bettering the traditionally low wages and poor working conditions that characterize the 5-and-10 cent stores and other chains.

Wages, hours, and conditions in these stores vary throughout the country according to the usual regional differences. In New York City, the average chain store worker is paid about $15 weekly.

According to the New York State Department of Labor, the minimum wage for a woman living with her family should be $20.73 a week; for a woman living alone, $23.26. Since most of the girls in the 5-and-10 cent stores live at home, they are being paid about three-fourths of the estimated minimum. A weekly budget looks something like this:

Room and board	$10.00
Clothes	2.00
Lunches	1.00
Cigarettes and incidentals	1.00
Amusement	1.00
Carfare	.60

A girl living at home usually contributes from one-half to two-thirds of her wages to the family.

Treatment of employees depends to a considerable extent upon the individual store manager. One Woolworth store in the Bronx has a manager so concerned with saving money that he considers little else. Counters formerly served by three girls now have but one. Shoplifting has consequently increased greatly, and the manager blames the girls. One of his basic assumptions is that all sales girls are dishonest; employees in the store work daily in an unhealthy atmosphere of suspicion. In another Woolworth store, also in the Bronx, sales girls are considered to be human beings and are treated reasonably well.

Four of the chains included in this survey (Grand, Green, Liggetts, and Whelan) have employed spies of the Willmark system. Woolworth has used the Burns Detective Agency. Active union members feel that they are being watched constantly.

During recent months an increasing number of CU members has requested information on wages and working conditions in chain stores and mail-order houses. The value of such information is pointed up by the fact that many products are sold only through chains, the manufacturers being in some cases parts of the chains themselves and, in others, unknown to consumers.

Due to the difficulty of obtaining information in these circumstances, CU's regular labor notes, covering conditions under which products reported on are manufactured, have been deficient in the direction of chain-distributed merchandise. The accompanying survey is an effort to make up that deficiency.

The status of labor in several leading 5-and-10 cent store systems and drug chains is reported on here. Material for the article was prepared under CU's direction by Miss Janet Austrian of Bennington College. Further data on other types of stores will be presented in later articles.

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OF THE 5-and-10 stores, Grand, Green, and Silvers (all subsidiaries of the H. L. Green Co.) and Woolworth have been organized in New York City by the Department Store Employees Union. As a result of a strike in March 1937, wages in these and all other 5-and-10 cent stores have been increased from 5 to 10 percent. In several other cities, workers have organized to obtain higher wages. Among the centers of union activity are Providence, Detroit, Akron, and San Francisco.

In Providence, 5-and-10 workers won a 7½ to 10 percent wage rise. Detroit sales girls increased their hourly earnings by 5 cents. In San Francisco, a strike ending last August won the 44-hour week and a $20 minimum wage, with a 10 percent rise for all employees receiving $20 or more. Wages in California for 5-and-10 workers are now probably the highest in the country.

The information following was variously obtained from a report of the New York State Mediation Board, from newspaper articles, from union contracts, from officers of the Department Store Employees Union and of the United Retail Drug Store Employees Union, and from interviews with employees.

Grand

The starting wage for sales girls in New York City is $14.40. After six months this is raised to the regular wage, $15.60. Very few employees receive the $20 maximum. Hours in New York are fixed by state law at a maximum of 48 weekly and by union contract at 8 each day, with time-and-one-half for overtime. Managers often violate this agreement by working the girls 10 hours on Saturday without extra pay for overtime, although the weekly total of 48 hours is met by arranging for 2 hours' less work on weekdays.

New York City employees of the Grand stores (with those of Green and Silvers of the same company) were organized last year by the Department Store Employees Union. After a 13-day sitdown strike in March 1937, they won a contract giving sole collective bargaining rights, seniority rights, a 5 to 10 percent wage increase, a week's vacation with pay, one-hour lunch period, 15 minutes for rest periods, and an arbitrator for settling grievances. The contract was extended in December. As previously mentioned, Grand has employed the Willmark spy system.

Grant

Sales girls start at $14.40 and after six months receive the regular wage, $15.60. The maximum is about $16.50. The work week is 48 hours, 7½ on weekdays and 10 on Saturday.

Particularly bad conditions are complained of in Grant stores in summer when there is practically no ventilation and scanty relief is provided by a few misplaced fans. Since March 1937 a speed-up system has been in operation.

Green

Wages, hours, and union relationship are the same as those of the Grand stores, to which the Green chain is corporately related.

Conditions in the Green stores were extremely bad until the advent of the union last spring. In February 1937 a group of employees wrote to the Department Store Employees Union:

"In our washroom there is not one window—no temperature controls—a dressing room, lunch room, and toilet all combined. . .

"Clothes hanging where vermin is quickly collected certainly is not healthful. Water bugs crawl all over the place and after working hours when the girls put their clothes on, the bugs crawl out of their sleeves and lining of their clothes.

"One bed and no first aid when necessary are minor details. . .

"Please don't let H. L. Green know if you are coming. They will try to hide everything from you or even clean things up for a few hours."

The lunch period at that time was 15 minutes.

Kresge

The starting wage is $12.96 a week, the regular wage $15.60, and the maximum $32.50. Hours are 48 a week, 7½ on weekdays and 10 on Saturday. Time-and-one-half is paid for overtime.

According to one of the employees, working conditions and relations with the company are good. When some of the employees showed interest in unionization at the time of the Woolworth and Green strikes, the company thoughtfully granted a wage increase before a union could be organized to demand it.

Silvers

See *Grand*. These stores are operated by the same company.

Woolworth

Wages and hours are the same as in the Grand stores, under a contract negotiated by the Department Store Employees Union after a 13-day sitdown strike in March 1937.

Recent profits of the Woolworth chain indicate that this company at least could pay a living wage to its 70,000 employees throughout the United States, Canada and Cuba, of whom 85 per cent are women. In 1937 the 2,013 stores brought in $305,000,000, of which close to $30,000,000 was net profit.

A share of this fortune came from the Woolworth cafeterias, not covered by the union contract, where girls work for as little as 31 cents an hour. The cafeteria workers do not have any guaranteed number of working hours; some receive only 62 cents for a working day of two hours. Men in some of the Woolworth stores are required to work 54 hours a week and even longer in badly ventilated cellars.

Employees say that Woolworth has not shown good faith in collective bargaining. When negotiations for a new contract began last fall, company representatives stalled for the apparent purpose of delaying action until after the Christmas rush. The result was a two-day strike in the middle of December that led to an extension of the original agreement and promise of the upward revision of wages.

It was on the first day of this strike that the Countess von Haugwitz-Revenlow (the former Barbara Hutton) returned from Europe for an announced 10-day visit. She promptly renounced her United States citizenship and caught the next boat back, while the girls on the picket line displayed placards reading: "Babs with her millions runs away. We *like* the U. S. but want more pay."

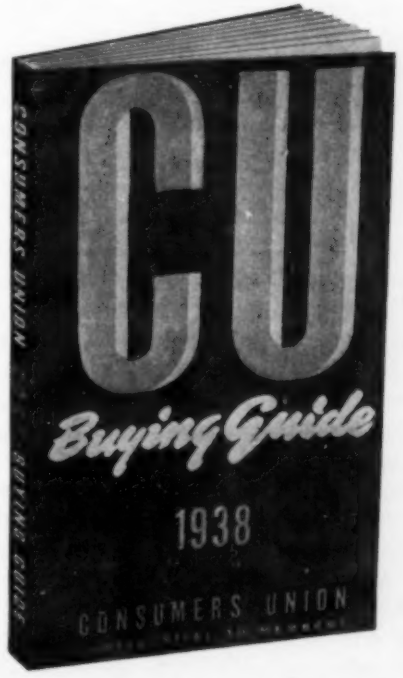
There is evidence that the company has broken the contract in stores where the union was not strong enough to enforce it. Last January, for example, a union member in a Woolworth cafeteria was fired. His sister, who worked in the same store, was told by the manager that if both she and her brother would renounce the union, he would be reinstated.

Woolworth has employed the Burns Detective Agency to keep tab on active union members in its stores.

Liggetts

Starting wages for a soda clerk are $15 a week; for a sales clerk, $18; for a pharmacist, $22. Average wages for a soda clerk are $16; sales clerk, $19; pharmacist, $25. Maximum wages for a soda clerk are $18; sales clerk, $20; pharmacist, $28. The 54-hour, 6-day week nominally prevails, but employees frequently work overtime without pay.

The present wages and hours date from last summer, when even lower



ON THE PRESS

CU members will receive their copies of the 1938 Buying Guide about the first of May. It will number 288 pages, will rate more than 2000 products.

pay and longer hours were changed as a result of a unionization movement. A company union has been fought by the United Retail Drug Store Employees Union, a CIO affiliate, which has a large membership in the New York stores. Eighteen active members of the CIO union have been fired by Liggetts, which has employed the Willmark spy system.

Walgreen

Wages are the same as in Liggetts. Hours are 10 a day, 6 days a week. The employees are not organized.

Whelan

Soda and sales clerks receive $18 and pharmacists $23 a week as minimum wages. The average for soda clerks is $19; sales clerks, $22; pharmacists, $30. Maximum pay for soda clerks is $20; sales clerks, $25; pharmacists, $35. The work week consists of 54 hours divided into 6 days. Regular rates are paid for overtime.

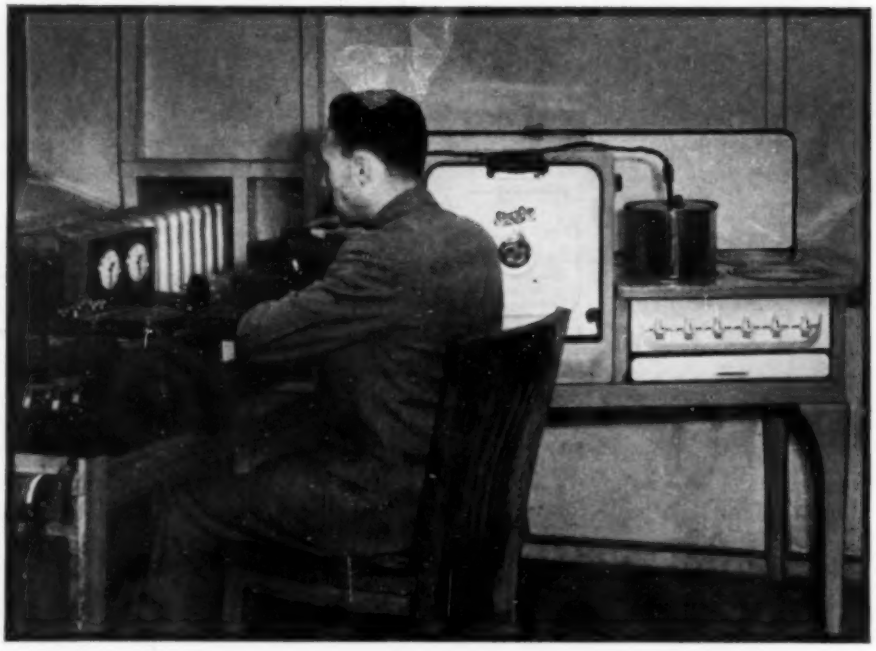
Last July the Whelan employees in New York City were organized by the United Retail Drug Store Employees Union, a CIO affiliate. The company's effort to disrupt the organization by formation of a company union was blocked by a decision of the State Labor Relations Board under New York's "little Wagner act." When the company failed to recognize the certified union, the employees struck, in the midst of the Christmas shopping rush.

A highlight of the strike was a series of large advertisements in the New York newspapers, wherein the company professed ignorance of any reasons for the walkout. The advertising campaign was curtailed after a reprimand from the State Labor Relations Board, which found that the statements were misleading.

The strike was settled by an agreement that gave the CIO union sole bargaining rights, seniority rights, vacations with pay, and machinery for arbitration of grievances. The prevailing 60-hour week, which sometimes stretched to as much as 80 hours, was reduced to 54, and overtime pay was granted for the first time. Most of the strikers were rehired, and the agreement provides for reemployment of the others on a monthly basis.

Whelan has employed the Willmark system.

Electric Ranges



A test for surface-unit efficiency, which does not necessarily go along with oven efficiency. Universal had the most efficient oven; Hotpoint, GE and L&H had the most efficient units. No one of the ranges proved outstandingly best.

With notes on efficiency, costs, convenience and safety, and ratings of seven models

★

ELECTRIC ranges come in great variety to suit the housewife's fancy. Different numbers of surface burners are available, and they may be grouped together or placed half at one end of the stove and half at the other. Numerous arrangements of ovens, warming ovens, and storage drawers are offered. There are models with legs, and models with cabinet bases.

And there are all sorts of accessories to tempt the eye and lull the mind—electric lights, salt-and-pepper sets, special racks and shelves, alarm clocks, time clocks, monel-metal tops, colored knobs and door handles to match your kitchen, even cigarette lighters. Some of the models almost begin to take on the appearance of a counter in a modern drug store.

But if what you want is a range for cooking and baking you will do well to look first at the "standard" models. De luxe editions are, for the most part, built up from the standard, and basic quality is more easily determined without the distraction of an array of gadgets. If you happen to want gadgets, they can be selected later, piece by piece, on the basis of your willingness to pay for the specific advantages each offers.

THE "feel" of a range gives at least some indication of sturdiness of construction. Drawers and doors should move smoothly and close tightly. Sheet-metal panels should not "give" excessively. Legs should be sturdy and solidly attached. Beware

of shakiness or flimsy construction. And while you're about it, examine the range with *use* foremost in mind. Mentally, if not physically, go through the motions of the various operations you intend to perform on it.

Look, too, for cracks and corners in which grease and dirt may collect. Porcelained surfaces wash off easily, of course. But notice what will happen when things spill or boil over, and discover for yourself whether surface and oven burners can be removed easily for cleaning.

First criterion for safety of any electric appliance is approval by the Underwriters' Laboratories. Ask to see their seal, or other proof of their approval. But their requirements deal only with safety from fire hazard; **safety for the user is covered only incidentally.** On ranges it is required, for instance, that no parts shall become so hot as to endanger electrical insulation or connections or to overheat adjacent walls; but the requirements do not concern themselves with temperatures of switch knobs, door handles, or other parts on which the operator may burn her fingers.

Provision is required for grounding all exposed metal parts with which the operator may come in contact, and minimum specifications are set for durability of oven thermostats—both items of importance quite aside from considerations of fire hazard. The purchaser of a range, incidentally, should make sure that the electrician installing it makes the proper connections to ground.

Standard models of seven makes of electric ranges were tested by CU consultants. All of them met reasonable standards of safety and of structural rigidity. But significant differences were found in efficiencies, which determine economy of operation. Unfortunately, surface-unit efficiency and oven efficiency did not go together. For example, the most efficient oven performance was found in the *Universal* range, while the most efficient type of surface unit was the Calrod, available on *Hotpoint, General Electric,* and *L&H* (Lindemann and Hoverson) ranges.

The Calrod units used 15 to 20 per cent less electricity than other types in bringing water to a boil, and were correspondingly faster than the others. Their greater efficiency appears to be due, in part at least, to the fact that they absorb a smaller amount of heat because of their smaller mass. Their superiority is not so great in longer cooking operations, where the absorbed heat figures less as a factor. Other data available to CU indicate that the Calrod units are relatively long-lived, as well as highly efficient.

Most ranges are available with either "open" or "enclosed" units, the open type generally being several dollars cheaper. Except for the superiority of the Calrod unit, neither type was consistently more economical than the other. The open type is, however, definitely harder to clean and, since the heating wires are exposed, more susceptible to injury or corrosion, especially as a result of foods spilling over onto them. Hence, the extra initial cost of the enclosed units may be worth paying in the long run.

Westinghouse now offers as regular equipment Corox enclosed surface units with a fourth special "simmering" heat, lower than the ordinary "low" heat of the regular units. Calrod units with *five* heats have still more recently come on the market. Especially where soups or stews are permitted to simmer for considerable periods, such special units may offer appreciable economies. They are likewise convenient for keeping foods warm when serving is delayed after cooking.

OVEN efficiency depends on two factors—energy required to preheat the oven, and energy required to keep it hot during use. To minimize the energy needed to keep it hot—to minimize heat losses—requires plenty of good insulation. And to minimize the cost of pre-heating requires the lightest construction compatible with rigidity, so that there will be the least possible amount of material to heat up. The faster the pre-heating is performed the better, since speed minimizes the time during which heat losses occur. It is also important for good oven efficiency that all joints, and especially all cracks around doors, be tightly closed.

In the tests, as already noted, the *Universal* range showed greatest oven efficiency, excelling the others both in pre-heating and in steady operation. The *Estate* oven, slowest to pre-heat, required 60 to 75 per cent more electricity for this than the *Universal.* To maintain a steady temperature of 400°F. the *Universal* oven required only 380 watts, against about 465—some 20 per cent more—for the *A-B* and *Hotpoint* ovens, which were worst in this respect. (Inferiority of the *Estate* ovens may have been due in part to failure of the oven doors to fit tightly in the sample tested.)

Cost of pre-heating is, of course, most important in short oven operations like baking cookies or biscuits, while the cost of keeping the oven hot becomes more important in such long operations as roasting meats. In the accompanying table, along with comparative pre-heating speeds, comparative costs are estimated for typical short-time and long-time oven operations, and for an "average" operation, designed to compare efficiencies for the combination of uses common in everyday cooking.

An estimate of the comparative total cost of a year's use of the oven is also given in the table, based on use of the oven 12 times a week. The average operation, and even more the total annual cost, will, of course, vary considerably from family to family, depending on cooking and eating habits; the figures are of value, however, in comparing the performance of the various ranges tested.

With electricity costing 3c per kilowatt hour, the difference in comparative annual cost between the best and the poorest oven amounts to about $7—a saving of nearly 30 per cent on the expense of the least economical oven, and of nearly 8 per cent on a total electric bill of $7.50 per month.

ALTHOUGH in most ranges baking is done mainly by a heater element in the bottom of the oven, it is common practice to combine with this a small overhead heater, to give more even heat distribution throughout the oven. Of the ranges tested, all but the *A-B* used such an upper heating element. Like all the others, this oven baked cookies satisfactorily, but it baked them appreciably faster when they were placed low in the oven than when they were placed near the top. The oven of the *Westinghouse* also appeared to bake slightly faster on the lower level than on the higher.

In most of the ranges tested the oven vent opening was in the front

Table of Oven Operating Costs

All costs are based on a rate of 3¢ per kilowatt hour.

Range	Minutes to Pre-heat (500° Setting)	Roasting[1] Meat ¢	Baking[2] Cookies ¢	"Average"[3] Operation ¢	Annual[4] Operating Cost $
Universal	10	5.4	2.0	2.85	17.75
L&H	16	6.0	2.4	3.35	21.00
Sears' Prosperity.	12	5.8	2.4	3.4	21.25
Hotpoint	12	6.1	2.3	3.4	21.25
Westinghouse ...	16	6.2	2.5	3.5	21.75
A-B	11	6.5	2.7	3.75	23.25
Estate	22	6.4	3.0	3.95	24.75

[1] Pre-heat, sear 15 min. at 500°F., roast 1½ hours at 300°F.
[2] Pre-heat, bake 12 min. at 400°F.
[3] Pre-heat, operate 50 min. at 400°F.; equivalent, in average cost, to the various baking and roasting operations involved in the preparation of standard day-to-day menus.
[4] Estimated on basis of 12 "average" operations per week; figures are for comparison only.

of the splash panel, but in two (*Sears'* and *A-B*) it opened behind the stove, where grease coming from it would be likely to discolor the adjacent wall.

Oven conveniences found in most of the ranges included "rack stops" to prevent the oven racks from sliding completely out during inspection of dishes being baked, and "broiling stops" to allow the door to be left slightly ajar during broiling. It must otherwise be left wide open to prevent heating up the oven and roasting the meat instead of broiling it. Both of these features are judged to have some convenience value. Mention is made in the listings of ranges lacking them.

Modern style trends seem to be in the direction of eliminating all switch markings. Indications of the "high," "medium," and "low" positions may be marked inside the storage drawer or in some other place about the range, but among the ranges tested only *Westinghouse* marked them at the switches themselves, where the markings belong. Another questionable style trend puts the switches on the splash panel behind the oven-top work space, instead of on the front of the range.

It would seem desirable for the person inspecting the stove to go through the actual motions of turning the switches for various operations, especially of the oven, to see for herself whether there are any complicated routines to be followed. The fewer knobs to be turned for any operation, the better.

All ranges tested except the *Hotpoint* were equipped with rotary slow-motion type switches instead of the older snap type. Experiments indicate that these are appreciably longer-lived than the snap type. (Slow-motion switches are available in the more expensive *Hotpoint* models.)

As for the accessories, their usefulness in any case depends on the user and her requirements. For those who want a maximum of freedom from the kitchen, the time clock which turns the oven on and off by itself will be a great convenience. For those who are merely absent-minded, the alarm clock which simply reminds the cook to turn the oven off will be of help.

Well-type cookers are generally available. Their usefulness depends on the cooking habits of the user. But intelligent use of them should make possible some additional economy in cooking.

Most ranges can be equipped with an electric lamp. Its desirability depends on the lighting facilities already in the kitchen; where they are insufficient, it is possible that better places could be found for installing an additional lamp than on the back of the stove.

Monel-metal tops, with which many ranges can be equipped, are expensive but definitely superior to porcelain-enamelled tops. They clean as easily, and will never chip, as enamel may.

Auxiliary ovens, warming ovens, varied arrangements of storage drawers and closets, additional convenience receptacles, cabinet bases —these are items which the individual user must select on the basis of her own needs. Salt and pepper shakers, colored knobs and handles to match the kitchen color scheme, and cigarette lighters are luxury items solely for those who want them and are willing to pay for them.

In most parts of the country cooking with electricity is unquestionably more expensive than cooking with gas. And greater care is needed to secure maximum economy of operation. The gas flame can be immediately adjusted to any desired height, whereas with the electric heater there are only three to five possible switch positions. Furthermore, the heat which the electric units absorb makes their response to adjustment slower, so that for maximum economy the switch must be turned *a little before* the change in heat output is desired.

The careful housewife can learn to make the fullest use of this "stored heat." Often it is sufficient to keep a pot boiling for several minutes after the unit has been "turned off."

For greatest economy of operation it is important to use the smallest unit which will serve for the cooking task at hand and to keep it turned as low as possible. In boiling vegetables, for instance, the unit should be turned from "high" to "low" before vigorous boiling sets in, since water gets no hotter no matter how hard it boils, and "low" heat will ordinarily be sufficient to keep it boiling satisfactorily.

The maximum in efficiency and cooking economy with surface units requires the use of cooking vessels which are flat on the bottom and large enough to cover completely the heat-producing parts of the unit. In experiments conducted at Iowa State College[1] plain aluminum cooking vessels

[1] "The Utilization of Heat from Electric Surface Units by Certain Cooking Utensils." By Louise J. Peet and Lucille O. MacDonald, Research Bulletin 212, Agricultural Experiment Station, Iowa State College of Agriculture and Mechanic Arts, Ames, Iowa, 1937.

on various types of electric surface units were found 10 to 20 per cent less efficient than similar enamelware or copper vessels, or even than aluminum vessels the bottoms of which had been blackened to increase their heat absorbency.

Intelligent organization of cooking may sometimes make possible doing two or more operations successively on the same unit, thereby saving the energy necessary to heat up an additional unit.

Similarly with the oven, since a large part of the cost of any oven operation is heating it to begin with, it is economical to cook as many things at once as possible, or to have a second dish ready to put in as soon as one is taken out, without letting the oven cool in between. Pre-heating should be timed so that the food will be ready for the oven as soon as the pilot light first goes out, signifying that the oven has been heated up to the desired temperature.

ALL the ranges tested for CU met reasonable standards of safety and rigidity of construction. Specific defects of particular samples are mentioned in the listings below. All were capable of satisfactory cooking performance, although there was variation in their efficiencies for various operations. Note is also made in the listings of special features found in some models, or of the lack in particular cases of convenience features found on most of the ranges.

Since several of the models tested showed leakage currents under certain conditions in excess of minimum safety specifications, attention is again called to the necessity of having all exposed parts properly grounded at time of installation.

No one of the ranges can be said to be outstandingly the best in quality. The tests would suggest, rather, that highest quality would result from combining Calrod surface burners with the efficient oven of the *Universal* range. (Some dealers may be willing to supply such a combination on special order, but a definite statement of the extra cost involved should be obtained before ordering.)

Prices given are current New York City retail list prices wherever these were available; they do not include costs of installation.

Best Buys

Universal Model E5346 (Landers, Frary, & Clark, New Britain, Conn.). $109.50 with 4 open units; about $20 extra for enclosed Chromalox units. Oven fastest in pre-heating and highest in efficiency of all those tested. Surface units somewhat less convenient to remove for cleaning than on other ranges.

Sears' Prosperity Model 300 (Sears, Roebuck & Co., Chicago). $109.95 with 4 Chromalox enclosed units. Same as Cat. No.—1908, spring-summer, 1938, $89.90 plus shipping charges; Cat. No.—1906, $79.95 plus shipping charges, same but with open units. Oven of average efficiency, and largest tested. Oven vent at rear, where discharged gases may foul wall. Three storage drawers, of light-gauge sheet metal, judged lacking in rigidity. Improvement in these respects is claimed in present production. Hinged panel may be lowered over surface units when not in use, to provide flat working surface; judged likely to be damaged if inadvertently lowered when units are still hot.

Also Acceptable

Hotpoint Model 581RA41 (Edison General Electric Appliance Co., Chicago). $141.50 with 4 Calrod enclosed units, most efficient type of surface unit tested. Oven pre-heated rapidly but was only average in efficiency because of high heat losses at baking temperature (possibly due partly to poor door fit). This model of *Hotpoint* had snap switches, a type shorter-lived than the rotary slow-motion switches with which other ranges tested were equipped. Splash panel at rear in one piece with cooking top, eliminating dirt-collecting corner seam.

L&H Model 8710 (A. J. Lindemann and Hoverson Co., Milwaukee). $146 with 3 Calrod enclosed units and well-type cooker; $136 with open instead of enclosed units. Oven efficiency average. In sample tested, frame of lower oven heating element was not grounded, there were no oven-rack stops, and the legs were attached by only two bolts, with resultant shakiness. Manufacturer claims that these deficiencies are remedied in current production. End panels and legs lacquered instead of porcelain-enameled; lacquered parts are more likely to yellow with age than porcelained parts.

Westinghouse Model BM64 (Westinghouse Electric & Mfg. Co., Mansfield, Ohio). $163.25 with 3 Corox enclosed units and well-type cooker. About $20 cheaper with 4 open units. Has one "Economizer" unit, adjustable to low "simmering" heat. Oven efficiency average. Switch positions marked on knobs. Splash panel at rear made in one piece with cooking top, eliminating dirt-collecting corner seam. Corresponding 1938 Model — BK64, $166.50 — has 3 Corox units, including an "Economizer" 4-heat unit, and a well-type cooking unit.

A-B Model E-3736 (A-B Stoves, Inc., Battle Creek, Mich.). About $125 with 4 open units; about $20 extra for enclosed Chromalox units. Oven efficiency below average. Uses no upper heating element for baking; cookies baked satisfactorily in both upper and lower portions of oven, but much more rapidly on lower level. Oven vent at rear, where discharged vapors may foul wall. Door has no "broiling stop." Cooking top height only 34 inches—2 inches lower than customary.

Estate Model 1674 (Estate Stove Co. Hamilton, Ohio). $137.50 with 4 open units; $157.50 with Chromalox enclosed units. Oven below average in efficiency (this may have been due partly to poor door fit). Thermostat switch turns oven on in addition to regulating temperature, thereby saving one switching operation. Thermostat does not, however, control broiler unit, which may therefore produce excessive temperatures if inadvertently left on with oven door closed. No "broiling stop," no oven-rack stops. Lower heating element in oven not readily removable for cleaning.

Insurance & Savings: II

For the first 20 years a separated program provided more insurance, more cash, and more flexibility. What happens in the second 20 years?

IN THE March *Reports* a 20-year comparison was made between two different savings-and-protection plans.

In the first, protection for dependents and savings for future contingencies were to be achieved through the purchase of a $10,000 ordinary life policy which rigidly combined the two purposes.

In the second, protection for dependents was to be secured through the purchase of $10,000 of renewable-term insurance, and the savings program kept entirely separate from the insurance.

To make the comparison valid, an identical annual outlay was assumed for each plan—namely, $190.40. This sum represented the annual premium for the holder of the ordinary life policy; and the annual premium ($106.50) plus annual outside savings ($83.90) for the term holder.

To round out the comparison, it must now be assumed that the policies have survived the first 20 years—a rare accomplishment—and that the policy holders intend to carry them another 20 years.

So far as the first 20 years were concerned, the superiority of renewable term was hardly debatable. The renewable-term-policy holder had a constant $10,000 worth of insurance throughout the 20-year period; the insurance in the ordinary policy declined steadily (down to $7,690 by the twentieth year) as cash value increased. The term holder's outside savings, on the basis of 3 per cent interest, had risen by the twentieth year to $2,322; the cash value in the ordinary policy reached $2,310.

Thus the term holder had more insurance, more cash, and, of course, a greater total estate. At the same time, his program gave him the advantages of complete flexibility, constant insurance, and freedom to use his cash without endangering his insurance.

A Word to Our Critics

SINCE the start of the series of articles on life insurance in the *Reports* CU's volume of mail has increased notably. And along with letters of commendation, requests for specific information, etc., have come a great many letters objecting to our stand, taking issue with our arguments, questioning our facts.

Inasmuch as CU's recommendations on life insurance disagree at several major points with the advice handed out by most of the companies, questioning is entirely natural and answers are in order. The editor has therefore assembled a cross-section of the most critical letters received and they have been answered point for point. The letters and the answers will appear in the next issue of the *Reports*.

One question about the authorship of the articles may be answered here. Mr. Edward Berman, whose name was signed to the first article, wrote that one only—as an introduction to the series. Several consultants have worked on the subsequent articles, with Mr. E. A. Gilbert, CU's special technical adviser on life insurance, supervising.

INSURANCE spokesmen generally discount all these major advantages by pointing with alarm to the increased renewal cost of the term policy in the twenty-first year. From $10.65 a thousand the cost jumps to $22.39 a thousand for the second twenty years—$223.90 on $10,000.

But just what is the burden put upon the renewable-term-policy holder by this jump? Just what effect does it have on the comparison between ordinary life and renewable term?

Readers of this series have learned that rising insurance costs cannot be avoided, that if they want to carry permanent, constant protection the costs must be met. And in the ordinary life policy, rising costs are met by buying decreasing insurance, by making overpayments which create what is called a cash value or savings.

These overpayments, it is learned in the later years, are not savings in the usual sense. If they are used as savings —that is, spent when necessary—their withdrawal virtually destroys the policy. Their real purpose is to meet the rising costs of insurance. They are props which hold up the ordinary life policy; when they are taken away, the policy collapses. They are necessary for the interest they earn, which, with the premium, pays for the insurance and increasing cash value.

In his ordinary life contract the policy holder is credited with the interest-worth of his cash accumulation. (If the interest factor were unessential, the policy holder would not have to pay the 6 per cent customarily charged for policy loans.) Since we have set out to compare like with like and since the interest on the cash value in an ordinary policy is used to meet the rising insurance cost, then the interest-worth on an outside accumulation can similarly be used with a renewable-term policy.

In other words, it will not be required of the term-policy holder that he alter his original planned budget ($190.40) because of the increased renewal cost. By applying part of the interest earned on his outside accumulation to cover the increase, the rise will not entail an additional expense.

The ordinary-life-policy holder will still be making an outlay of $190.40 in the twenty-first year. And the holder of the renewable-term policy, by using the interest-worth of his outside accumulation, will not be called upon to exceed that outlay. At 3 per cent, the interest-worth of his $2,322 cash accumulation is $69.66. This is more than sufficient to meet the increased renewal cost of his policy, leaving a

balance to be added to the outside cash.

We have constantly emphasized the need for flexibility, and the wisdom of separating insurance from savings in order to attain it. The holder of the renewable-term policy, we see now, can meet the increased renewal rate and, if he wants to, actually *reduce* his outlay. Applying the entire $69.66 of interest-earnings would bring the outlay down to $154.30—at a time when the ordinary-life-policy holder, lacking flexibility, must continue to expend $190.40.

It should be noted, moreover, that the lower outlay is securing a larger estate—$12,322 (insurance plus savings) as compared with the rigid $10,000 estate provided by the ordinary life policy.

BUT what if the interest on the cash accumulation could not be used, if the policy holders, in both cases, were compelled to spend their savings?

The term-policy holder in the twenty-first year would have available $2,322 in free cash. Spending this cash would not impair his insurance program. And his $10,000 renewable-term policy could be maintained for another twenty years with an annual outlay of $223.90.

When the holder of the ordinary life contract withdraws his cash accumulation ($2,310) his estate is no longer $10,000, but $7,690. Despite the fact that he has withdrawn his savings and desires to discontinue future savings, he discovers he cannot do so; the original premium which provides for increasing savings and decreasing insurance must be maintained. To this premium is now added interest for the loan, which, at 6 per cent, is $138.60; to maintain the impaired ordinary life policy in force will require an annual outlay of $329—more than $100 in excess of the term holder's expenditure.

Both policy holders had been equally thrifty. Both had saved for twenty years and then had spent their savings. But the term-policy holder can continue a $10,000 policy at a cost of $223.90 a year while the ordinary-life-policy holder must spend $329 for a policy that will provide only $7,690 for his beneficiaries.

If the latter policy holder is insurable, he can replace his costly contract with term insurance; but he is at the mercy of the company, which can accept or reject his application. If he is uninsurable and cannot meet the high cost of his policy, he must forego insurance. Thus, to the billions of dollars lapsed every year will be added a few more.

Meantime, the holder of the renewable-term policy is, of course, free to drop insurance at will. And so, if he wishes to keep his total estate at $10,000, he can periodically slough off part of his insurance as his outside fund makes it unnecessary.

In other words, to duplicate the $10,000 estate of the ordinary-life-policy holder in the twenty-first year, he could drop $2,300 of insurance, the amount of his outside cash accumulation. His premium for the remaining $7,700 of insurance would be $172.40—still less than the budget originally contemplated. If he should adhere strictly to that budget—$190.40—he would have an annual $18 for savings, and the total estate would again build up beyond $10,000.

ONE further comparison completes the picture. With both policy holders carrying their contracts and continuing to save according to schedule, the cash value in the ordinary life will eventually exceed the outside accumulation of the term holder. In the fortieth year the cash value amounts to $5,730, compared to an outside accumulation of $4,600. If the ordinary-life-policy holder at that time has no further need of his insurance, he can surrender the policy and enjoy a cash accumulation that is larger than the renewable-term-policy holder's.

This is an advantage of the ordinary life policy over the renewable term. To realize this advantage, the buyer must be prepared to pay his full premium (for insurance plus savings) faithfully for four decades, despite the thousand and one emergencies that will arise. And he must resist all temptations to use any part of his cash.

The life of the average policy is short. Low estimates place it in the neighborhood of 7 years; the most generous estimate is 17 years. CU members should ask themselves: Among all the people I know, how many have held the same policies for 40 years? How many have policies purchased in or before 1898?

The validity of the 40-year comparison, showing more cash in the ordinary life policy than in the fund outside the renewable-term policy, depends on the slim possibility of such a long-term plan.

How Policies Terminate

IN THE March *Reports* average annual lapses of life insurance policies were erroneously given as totaling $18,000,000,000. The correct amount is about $5,000,000,000.

By way of giving a comparative picture we present here a table covering terminations of life insurance policies from all causes for the four-year period from 1933 to 1936 inclusive. Figures are from the *Insurance Year Book*, Life Edition, 1934-5-6-7.

TERMINATION	AMOUNT
Death	$ 3,676,649,063
Maturity	550,354,134
Surrender	15,582,517,167
Lapse	23,685,829,625
Expiry	6,695,541,384
Change	2,492,335,735
Disability	99,394,899
Total	$52,782,622,007

Life Insurance Companies

CU HAS made, and will continue to make, recommendations of desirable contracts issued by various insurance companies. But recommendations of specific policies are in no way to be construed as endorsements, or guarantees, of the financial stability of the companies mentioned. Whether the company is large or small—and size is not necessarily an indication of strength—CU cannot pass judgment on its financial condition. It is the obligation of the various state Insurance Departments to examine the financial statements of the companies and evaluate their stability.

ANNOUNCING

Western Consumers Union

CU's first regional division

IN CALIFORNIA this month, two years almost to the day since publication of the first issue of the *Reports*, the work of Consumers Union's first regional division gets under way. Formed under the guidance of Professor Robert A. Brady of the University of California, the new division will be known as Western Consumers Union. Headquarters are in San Francisco, at 251 Kearny Street.

Miss Mildred Edie, journalist and editor, is director of the office; and in the article on the opposite page she outlines some of the reasons behind its establishment.

In answer to the insistent demands of western members of CU for more ratings of products sold primarily on the coast, the new division will prepare a monthly supplement for publication in CU *Reports*. To begin with the supplement will cover only products sold in the California markets. As rapidly as possible, however, its scope will be broadened to include important regional products sold in all the far western states.

The same types of products will be covered each month in the national publication and in the supplement. When canned pears are reported on in the *Reports*, for example, additional brands sold only in the west will be rated in the supplement.

Western brands will be shipped to the national offices in New York City to be tested along with brands purchased in other parts of the country. But insofar as possible the supplement's reports will be written up in terms of local consumer problems and marketing conditions. And there will be regular articles on subjects of special interest to Coast members (e.g., earthquake-proof housing).

The annual membership fee for both the *Reports* and the supplement will be $3.50. Any present member of CU can become a member of the western division for the remainder of the period of his membership by sending in fifty cents to the San Francisco office.

ALTHOUGH Western Consumers Union will function under a charter granted by the national Board of Directors and be fully responsible to the national Board, immediate control of its policies will be in the hands of a western Board of Councillors. The chairman of this board, Dr. Brady, is a vice-president of the national organization and was a member of its first Board of Directors. During NRA days he was chief of the Standards Division of the Consumers Advisory Board. He later became chief of the Standards Research and Analysis Section of the Consumers Division of the Department of Labor.

DR. ROBERT A. BRADY

Who supervised the establishment of CU's new Western Division, and who is chairman of its Board of Councillors

Other members of the Board of Councillors are Richard J. Neutra, noted California architect and low-cost housing expert; Dr. Thomas Addis, Professor of Medicine, Stanford Medical School; Roe H. Baker, former president of the California State Federation of Labor; Dr. Harold Chapman Brown, Chairman of the Department of Philosophy, Stanford University; G. G. Sander, attorney; H. P. Melnikow, Director of the Pacific Coast Labor Bureau; Robert O. Folkoff, Certified Public Accountant; Mrs. Gerard T. January, a director of the League of Women Voters and of the YWCA, and chairman of the first study group on consumers problems in the American Association of University Women; Dr. Robert J. Oppenheimer, internationally known physicist at the University of California; Eric H. Thomsen, former Regional Sociologist of the Resettlement Administration; Rabbi Jacob J. Weinstein, Director of the School for Jewish Studies; Wright Williams, organizer for the International Longshoremen's and Warehousemen's Office Employees Union.

AMONG the sponsors of Western Consumers Union are Dr. Towne Nylander, Director of the Twenty-First Region of the National Labor Relations Board; Congressman Jerry Voorhis (California); Dr. Lewis M. Terman, Chairman of the Department of Psychology, Stanford University; Congressman John M. Coffee (Washington); George West, newspaper columnist; Dorothy Parker, writer and movie scenarist; Dashiel Hammett, writer and scenarist; Howard Costigan, Executive Secretary, Washington Commonwealth Federation; Lila A. Hunter, President of the Washington State Federation of Teachers; Frank Tuttle, movie director; State Senator Culbert L. Olson (California).

NEUTRA BROWN JANUARY WEINSTEIN

The western division has twelve councillors; here are four (see page 16)

A Western CU—Why and What?

by MILDRED EDIE

Director, Western Consumers Union

IT IS something of a paradox that ever since the first issue of CU *Reports* came off the press two years ago, California has provided more members than any other state except New York. It is paradoxical because the Pacific Coast markets sell locally-manufactured goods, identified by local brand names, to an extent that is probably unsurpassed anywhere else in the country. Thus, despite large sales of nationally-advertised goods as well, the far-western member of Consumers Union has not found nearly so many familiar brand names rated in the *Reports* as has the eastern member.

The Pacific Coast is a small nation in itself. Along a shore line that is longer than the distance between New York and Kansas City are the three chief cities: Los Angeles, San Francisco, and Seattle. Inland are the famed fruit and vegetable valleys and the forest-studded mountains. Spotting the valleys and climbing up the foothills are small cities and towns where the local chambers of commerce watch carefully over lumber mills, canneries, and produce markets. In this vast stretch there live, according to the 1930 census, about 8,200,000 persons.

WESTERN newspapers and radio station owners say that the coast is a rich market for national advertisers. Certainly the national advertisers have done their bit toward filling the wide countryside. Alka-Seltzer is heralded amidst the beauty of the redwoods, and Burma Shave signs rear their ugly verses among the pinkish blooms of the cholla cactus.

But hardly a highway has been neglected by Foster and Kleiser, the billboard kings of the coast, who derive large sums from advertising brand names that are never seen east of the Pecos River. Some of them: Associated gas, Ghirardelli ("say Gear-ardelli") chocolate, M.J.B. coffee, Leslie's salt, Albers cornflakes, Langendorf bread.

Instead of finding an A & P store in every neighborhood with its Eight O'Clock coffee and Ann Page jam, the California consumer visits a Safeway store to buy Airway coffee and Highway canned goods. If not a Safeway, then a McMarr, or a Van's and Continental, or a Hagstrom store. For the west is chain store country, particularly California with its three-fourths of the coastal population. In that state the chains handle about 53 per cent of the meat and grocery business. With the exception of the A & P, which has only a few stores, the chains are strictly western with their own private brands.

It is more difficult to determine the importance of regional brands in other commodity lines. Consumers have found, however, that a number of electrical appliances are of western origin and sale. With clothing the emphasis in buying is upon the store rather than upon the brand name, except for such well-known brands as Arrow and Manhattan. Businessmen make the following guesses for the percentage of other commodities sold by regional brands: water heaters, 50 per cent; gas ranges, 60 per cent; radios, 10 per cent; heavy building materials, 75 per cent.

INTEREST in consumer problems has mushroomed in the west during recent years. California has more consumer education classes in high schools and junior colleges than any other state. Up and down the coast, adult education classes in consumer problems draw big attendances.

By no means unaware of this spontaneous movement, business interests have been making energetic attempts to capture it and train the consumer to think in terms of "What's good for business is good for you." And an important task for Western Consumers Union will be to expose these consumer company unions by investigating and making known their subsidies.

But the main work will be to establish a bona fide consumer agency that will crystallize the fast-growing interest of western consumers with a long needed service.

Mattresses

An analysis of the different types and ratings of nine innerspring brands—with a discussion of state regulations

★

THE selection of a mattress presents a difficult problem to the consumer. With few other products is it more important to know what lies beneath the surface and with few is it more difficult to find out. Cut-away floor samples are valuable only to the consumer who knows what to look for *and* will insist on a guarantee that the mattress purchased is of the same quality as the sample examined.

Most retail salesmen actually know no more about the mattresses they sell than the buyer does. Too often the consumer is left to base his choice on a highly advertised brand name, on the color and design of the ticking, the number of "ventilators," the type of handles.

What points up the problem is the fact that at least 50 per cent of the retail mattress business, according to common estimates, is fraudulent. The custom of buying up cheap "promotional" bedding and offering it for "half price" on special three-day sales is widespread, even among large department stores. High-pressure installment houses, with sensational and spectacular advertising, offer cheap bedding under ridiculous "claim" prices and in a perpetual state of special sale. And such guarantees as are given are just about as reliable as the dealers.

Bedding of this sort—constituting a high proportion of the bedding sold—is never worth the "claim" price and only in exceptional cases is it apt to be a good buy at the "sale" price. (See rating of Stearns and Foster *Lady Fair* below for further discussion of this practice.) Occasionally odds and ends of floor samples will be sold at low prices, but in most such cases only a few shopworn pieces are available.

The best way to buy mattress satisfaction is, first, to learn the essential points of quality and the names of some of the more reliable manufacturers; then to shop at the most reliable house-furnishing or department stores available, pick the best value, and get a *written guarantee that your purchase is as represented.*

If it is necessary to buy by mail order, study the specifications carefully and ask for assurances in writing that material and construction are as specified. Consumers living in small communities can insist that their dealers procure recommended bedding if they do not carry it, for it can be had, with a brief delay, almost anywhere in the country.

*Materials and Regulation**

IT WOULD seem that the sanitary condition of merchandise so intimately associated with public health should be regulated by strict legislation and careful enforcement in every state in the union. But fourteen states have absolutely no laws of any kind in reference to bedding; and twenty-one more have virtually impotent laws, or inadequate enforcement, or both. Meantime, mattresses filled with inferior and—often enough—downright filthy materials abound in the market.

All animal materials—wool, hair, and feathers—should be sterilized when new, because of the danger of bacterial contamination from the animal. Secondhand materials of all kinds—stuffings from old mattresses, old clothing, etc.—are too dangerous to health for sale under any conditions. Yet only New York and Pennsylvania have laws forbidding the use of secondhand materials. These laws were passed in 1937, and the New York State law does not go into effect until July 1938.

Only fifteen states have laws requiring the sterilization of bedding materials. And these laws, because of the difficulty of thorough sterilization, the inadequacy of inspection, and the expense and delay of obtaining court convictions of violators, offer pitifully little protection to the consumer.

Protection against widespread fraud and misrepresentation is afforded at least technically by laws requiring accurate labeling of the kinds and amounts of filling materials present. Yet only nine states require such statements.

This extremely lax situation makes it imperative that consumers be always critical of bedding purchases, especially of cheap items made for "sales" and merchandise lacking specifications. With anything of this sort particularly, *demand a written guarantee of the kind*

* The discussion of state laws as given in this section is based on material from "Bedding and Upholstery Review," NYC.

and percentage of each type of material present and of its sanitary condition. And do not buy—from a large store any more than a small one—unless you can get such a guarantee.

Sanitary and specification tags do not, of course, offer much indication of quality or durability of the materials listed. The consumer will be confronted with innerspring mattresses for from $12 to $70 and with cotton mattresses for from $4 to $40. Many factors contribute to the quality of a mattress. What are the major points to keep in mind?

Plain Cotton Mattresses

THESE are the cheapest mattresses commonly sold. They are usually filled with loose linter cotton or cotton waste. And even the best of them, which may be priced as high as $12, will soon get lumpy and thin out at points of body pressure. None can be recommended.

Felted Cotton Mattresses

FELTING the cotton linters and cotton waste prevents the lumpiness that cannot be avoided with plain cotton. Cotton felt comes in all grades—ranging from the cheapest, with short fibers which do not felt properly and may contain impurities (sand, seed particles, plant particles, etc.), to the very expensive felts made of long clean fibers. In poor mattresses the felted layers are sometimes put over a center core of plain cotton.

Good cotton felt mattresses, made of all-white felt throughout, will be about 7 inches thick (thicker in the middle than at the edges) and should sell for around $20. They are recommended for good service at a low price. More expensive felt mattresses may be made of long-staple cotton, spinner's cotton, and China cotton. These have a firm, even sleeping surface and should give very good service.

Kapok Mattresses

A GOOD grade of prime Java kapok makes a very comfortable mattress for a short time. But all kapok pulverizes, and in a few years the mattress will wear down unevenly. The pulverizing process, furthermore, will constantly deposit a fine dust on the floor under the bed.

A kapok mattress is *not* a good investment because of its initial high cost, its inconveniences, its brief life of satisfactory service, and the impossibility of reconditioning it.

Hair Mattresses

THE BEST grades of all-hair mattresses are filled with curled mane hair (Royal White Mane Drawings) of South American horses. They cost about $125 to $150, but they should give a lifetime of service. Materials of animal origin—hair, wool, silk, feathers—tend to keep their shape and to withstand the disintegrating effects of age. They are apt to take on odors of their own upon aging, however, and so must be frequently aired.

Lower grade hair mattresses contain mixtures of long and short curled mane and tail horsehair. Cattle tail hair is sometimes used, but is undesirable because of the difficulty of complete removal of the cattle odor. Cheap hair mattresses are filled with plain horsehair (short ends) mixed with varying amounts of hog hair, which is short and stiff. These will sell in the single size for around $40 to $60.

A good, serviceable, moderately priced hair mattress should contain in the full size not less than 45 pounds of 100 per cent curled horsehair (50 per cent mane and 50 per cent tail) and should retail for around $70. It should last at least as long, and give as good service, as the $39.50 *Spring-Air* innerspring mattress, listed below as a "Best Buy."

Hair mattresses should be bought only from firms that specialize in them.

Innerspring Mattresses

THE innerspring mattress has enjoyed great popularity in recent years. And it is in this field that the greatest number of gross deceptions and rash promotions find place. Do not ordinarily expect to buy a satisfactory innerspring mattress for less than $20. (See listing of Stearns and Foster *Lady Fair* below.)

Quality of innerspring units varies with the number of turns of wire or coils in each spring and with the temper and gauge of the wire. Wire not properly tempered and coiled will bend, lose shape more readily, and often become exceedingly noisy.

While the number of springs in the unit is important, it is not the primary consideration. The number varies from around 220 to 360 in the full-size models of the better units, (and

Some States Have Laws—Some Don't

New York and Pennsylvania have laws forbidding the use of secondhand materials. California requires the sterilization of second-hand fillings. All three require a statement of the percentage of filling materials, and all three have a relatively large number of full time inspectors who collect and analyze samples.

The following states and cities have laws either about sterilization or percentage of filling, or both, and while the number of inspectors and hence the degree of enforcement is in all cases small, some active enforcement is carried on:

Connecticut
Dallas, Texas
Delaware
Detroit, Mich.
Dist. of Columbia
Maryland
Massachusetts
Minnesota
Missouri
North Carolina
Oregon
Tennessee
Washington
Montreal, Can.

The following states have either weak laws, or laws which are known to be inadequately enforced:

Alabama
Arkansas
Colorado
Georgia
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Montana
Nebraska
New Hampshire
New Jersey
(new laws pending)
Ohio
Oklahoma
Rhode Island
Utah
Vermont
Wisconsin

The following states have no laws:

Arizona
Florida
Idaho
Michigan
(except Detroit)
Mississippi
Nevada
New Mexico
North Dakota
South Carolina
South Dakota
Texas
(except Dallas)
Virginia
West Virginia
Wyoming
Ontario, Can.

may run over 1000 in the Marshall type described below), but too much advertising stress is placed upon this detail. Not infrequently a strong assemblage of 240 springs will prove more durable than some highly touted unit with around 400. An innerspring unit should not, however, contain less than 100 springs.

The durability of an innerspring mattress is largely determined by the way the springs are assembled, and this may serve as some indication of general quality, since good assemblage is less likely to be given to poor wire. Descriptions of a few of the more common types of assemblage follow.

Bonnell. The Bonnell unit (fig. 1) is the type put in most cheap and promotional innerspring mattresses. The individual springs are large and bulky and the ends of each are terminated by knotting to the coil itself. The result of this is early slipping and distortion of the springs. And once they are out of line the resulting uneven surface quickly eats into the padding above it. The springs of the Bonnell unit are joined by stiff helical ties, and these frequently break. While the finished mattress may seem soft and flexible, the spring unit is stiff, and rolling, folding, or even turning can easily damage it.

These units are nearly always made of poor grade, unenameled wire (better springs are lacquered, enameled or finished with aluminum paint to prevent rust). They will be found in nearly all mattresses below $25—and even in some more expensive ones.

Various manufacturers make modifications of the Bonnell unit. But modifications are of little practical value, unless they correct the prime fault of the Bonnell units, which is the shifting and binding of the surface coils.

Consumers are advised to consider *no* mattress containing a Bonnell unit or version of it. While nearly all manufacturers use the unit for cheap promotional selling, the better manufacturers do not generally permit the use of their names on mattresses containing it.

Hager. The better grade units of this type have "offsets" on the springs where they pass through the helicals, to prevent shifting of the coils, and the springs are staggered. Also, the coil wire is bent near the knot so that the knot cannot easily slip (fig. 2). The Young unit is similar except for special edge springs.

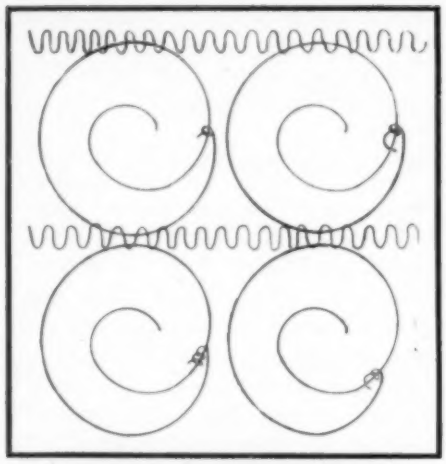


DIAGRAM of BONNELL UNIT

The prime fault: shifting & binding

Units in which the springs are staggered but have no offsets are little better than the plain Bonnells.

Karr. The ends of the coils in the Karr unit (fig. 3) are locked into the helical ties. It is thus very difficult for an end of wire to slip or come loose or for any one spring to get caught or jammed in any of the others. Consequently a mattress containing a Karr unit can be rolled and turned with comparative safety. Coils of the units are spiraled in opposite directions on each row, an arrangement which counteracts the tendency of the springs to uncoil partly, or lose their alignment. The unit is patented by the Charles Karr Co. and found in the *Spring-Air* mattresses listed below.

Marshall. This fairly common assemblage is used by the Simmons Co. for their $39.50 *Beautyrest* mattress. It consists of a large number of rather small, light springs, slightly compressed and stitched up separately inside of muslin pockets. These are packed closely together and in some mattresses, though not in the *Beautyrest*, tied together for extra durability. The more coils there are the more fragile the mattress will be. The Simmons *Beautyrest* contains 837 springs in the full size. Other makers build mattresses containing both more and less.

Marshall-type mattresses are comfortable when new but cannot be recommended because of their extremely poor durability; the springs rub back and forth and break the muslin covers at the sides and at the ends. When the cover breaks on the side the partly compressed spring will buckle out, getting caught in adjacent springs; and when it breaks on top the compressed spring will push up, causing a bump. To spend money for remaking these mattresses is throwing good money after bad. Simmons' own figure of "only 2¼¢ a night" means only a scant five years of wear for a $39.50 mattress. A *Spring-Air* mattress with a Karr unit at the same price is *guaranteed* for 15 years of satisfactory service.

A further disadvantage of Marshall-type mattresses is that it is practically impossible to roll, fold, or bend them without injury, even while turning them on the bed.

Any spring-filled mattress should be folded or rolled as little as possible, of course, and never beaten. And only an open-coil or box-spring should be used—never a flat or fabric-and-link spring. The latter sag all too readily, distribute the body weight unevenly, and thus place undue stress and strain on the mattress springs.

A type of innerspring construction entirely different from any of the types discussed above is featured by Sears Roebuck and was found in private brand items in several New York City department stores. It is made up of continuous coils interlocked into one unit. While it eliminates some of the defects of the knotted coil springs, it is expensive in good grades and, lacking cross-bracing, is apt to sag.

Innerspring Upholstery

NEXT to the springs and underneath the top upholstery in an innerspring mattress is the pad, or insulating material, to protect the filling from the springs. While a pad is not essential with a Marshall-type spring, the lack of one on other units indicates a very poor mattress. Pads may be made of sisal, jute, or dried vegetable matter, patented rubberized hog hair (such as Latex and Nukraft), or felted cotton. Sometimes a plain covering of jute-burlap is used, which is not sufficient.

The sisal is satisfactory when quilted or padded. Unpadded, coarse sisal is often used in cheap mattresses, but is inclined to rustle and give a stiff sleeping surface. Latex and Nukraft pads are satisfactory, but the advertising

emphasis placed on them is considerably out of proportion to their value. Cotton felt pads are most desirable—silent, soft, and durable.

The filling which forms the sleeping surface of the innerspring mattress corresponds in range of quality to fillings of the non-spring mattresses already discussed.

Hair surfaces on one or both sides of the mattress are valuable if the hair is predominantly horsehair. Seventy-five per cent of long, curled horsehair, either mane or tail, and 25 per cent cotton felt is a satisfactory mixture. But a mixture on the order of 80 per cent cotton felt and 20 per cent hair (of which 4/5 may be hog hair and 1/5 short ends or combings of horsehair) cannot be recommended. If the filling is represented as entirely horsehair, with no felt except the pad, there should be about 15 pounds of hair on each side. Eight-ounce hairproof ticking should be placed between the hair and the springs to keep the hair from working through into the spring unit.

Trimmings, Tickings, Tuftings

IT IS important that borders and edges be so constructed as to keep the filling in shape at the edges. The prebuilt border is satisfactory for innerspring types, and the rolled edge with extra stitching on the sides is suitable for felt mattresses.

Good mattresses generally do not fluctuate greatly in price, nor vary much in style, and frequently they are very plain in appearance. It is the run-of-the-mill "$39.50 values" slashed "drastically" to $19.75 that go in for the gaudiness.

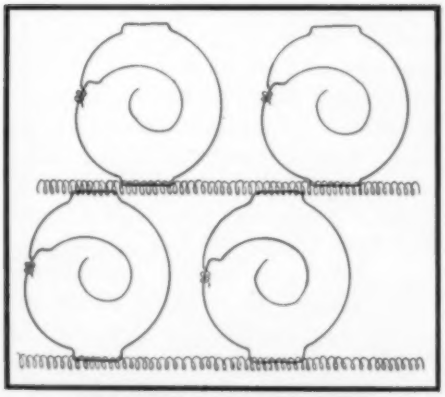


DIAGRAM of HAGER UNIT

Better than Bonnell—not so good as Karr

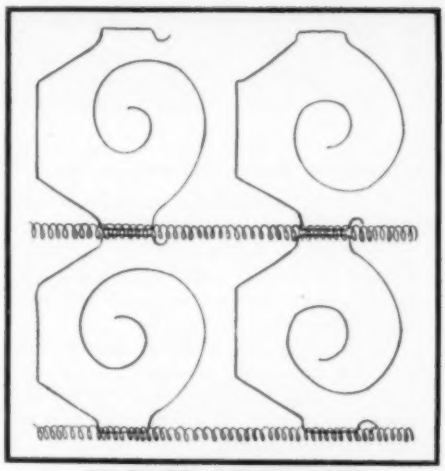


DIAGRAM of KARR UNIT

The prime asset: no slipping or catching

Confronted with mattresses such as these, the practical consumer will select the familiar blue and white striped, patented ACA, unsized drill ticking in the 8-ounce grade. Fancy sateens and damasks are one of the chief eye-catchers used on poor mattresses; if you buy them, make sure they are tightly woven, unsized, and colorfast. Eight-ounce tickings are best, but 6-ounce ticking will give reasonable service. Both are generally available.

Ventilators are put on nearly all innerspring mattresses. While they are mainly for sales appeal, they are of some use should the mattress ever require sterilization. A large number of ventilators simply provides easy access for vermin. The best mattresses have few ventilators, and these are screened with very fine wire mesh to keep out dirt and the larger insects.

Handles on good mattresses are mostly of the plain "tape" or the "rope" type, fastened securely.

Avoid "tuftless" mattresses unless there is evidence that the important mission of tufting—to keep the stuffing from shifting—has actually been performed under the top surface. Most "tuftless" mattresses are better described as "untufted," and in the long run offer little comfort value. Avoid raw cotton tuftings; button tufts are advisable on innersprings.

For children, a mattress filled with a good grade of cotton felt is most satisfactory. Innerspring mattresses are considered by some to be too soft for children. While hair mattresses are comfortable, firm, and durable, children are sometimes allergic to them, and they are very expensive.

ONLY a few of the many brands and types of mattresses on the market are rated here. Prices given are for standard, double-bed size

Best Buy

Spring-Air (Spring-Air, Holland, Mich.). $24.50 to $45. Spring unit (Karr) is guaranteed for from 5 to 15 years depending on price. The $45 model, No. 60, is a two-piece mattress, with a separate 2-inch, all-cotton felt pad on top of the spring unit. The best quality regular one-piece unit, No. 40, sells for $39.50. Both are guaranteed for 15 years.

Rights to make these mattresses are leased by the Karr Co. to some 50 manufacturers. A rigid quality standard appears to be maintained, with the franchise revoked if a manufacturer does not live up to specifications. All the models are upholstered in cotton felt. All contain the flexible Karr spring unit described in the text. The use of sisal or cotton felt pads is optional with the manufacturer (do not accept sisal in the higher priced mattresses).

Quality differences between differently priced models lie in number of springs, gauge of wire, quality of the cotton felt and ticking, and type of upholstery finishing. The manufacturers' guarantees are believed to be reliable; satisfactory adjustment of complaints depends on the dealer.

Also Acceptable

Stearns & Foster Co. (Cincinnati). Mattresses made by this company and sold under various brand names are among the better promotional bedding. One of the brands, a *Lady Fair* mattress purporting to contain a Hager unit with offsets, has been seen on sale for $19.75—an excellent buy at the price. Other models with various constructions have been examined at "sales" in good department stores. In every case they have been worth the money asked, but not the "claim" price.

Ticks have been chiefly of inferior and much sized damask, but a limited selection of 6-oz. drills has in most cases been offered. Fillings and pads have been of good grade cotton felt. All were well—perhaps too well

—stuffed, tending to be stiff and solid. Samples examined which contained "horsehair" tops and bottoms had a much larger proportion of felt than of hair, and the latter, while all horsehair, was mostly short ends. Purchase such "sale" bedding only when recommended spring units are used.

Quali-Rest (Quality Mattress Co., Rochester, N. Y.). $42.50. Entire unit covered with a Sanforized ticking which may be entirely removed by zipper and washed. The pads underneath are attached by ties to the innerspring unit and can be easily removed for sunning or airing. All parts are separately replaceable. While this brand does not have national distribution, the manufacturer will send it prepaid to any address in the United States. Contains the Marvel innerspring unit, similar to the Karr unit (see above) but of somewhat inferior quality.

Honor Bilt (Honor Bilt Products, Inc., Philadelphia). Contains the Nachman unit, considered less durable than Karr or Hager.

Not Acceptable

Beautyrest (Simmons Co., NYC). $39.50. A Marshall type pocketed-coil unit. Very comfortable when new, but very poor durability. Difficulties in getting adjustments under the 5-year guarantee have been reported.

Palmer Quilted (Palmer Bros. Co., New London, Conn.). $39.50. These mattresses all have the same patented quilted top but are made on a variety of spring units. They are acceptable only when known to contain a recommended unit. A *Palmer-Foster* was examined which contained a modified Bonnell unit made by the Foster Mfg. Co., Utica, N. Y. Models have been seen, however, with Owen units, which are acceptable.

The following are listed as "Not Acceptable" because they contain the Bonnell type unit.

Imperial (The Englander Spring Bed Co., Inc., Brooklyn). $39.50.

Slumber King (Simmons Co.). $24.50.

Deepsleep (Simmons Co.). $29.50

CU'S MEMBERS report-

Suggestions from Members

TO CU: . . . I've often wondered just how you select your topics. Have you an omnipotent being who selects them for you or do you pick topics blindfold out of a bag? If you have, your luck has been pretty good so far.

Would it be too much trouble or expense if with every renewal of subscriptions of your members you request of them their selection of the ten topics they'd like discussed?

You could thus select from these lists those topics which are most popular and yet come within your scope.

What say you fellow members?

DAVID FELLNER

Bronx, N. Y.

Letters from members suggesting reports probably outnumber all others in CU's daily mail. And the suggestions are, of course, a major factor in determining our schedule of test projects. Mr. Fellner's proposal is a thoughtful one, and may prove workable.

To Hell With Us

TO CU: Your editorial on "Diet on $1.25 (per week)" in the February issue is ridiculous. To show how unfair, how biased and prejudiced you are I'd like to give a few figures. Of course I know you wouldn't print this so here goes. I want to get a load off my chest.

A very close friend of mine has a house and works in a textile town in the south. When times were good before union agitators came and put things on the bum he was drawing $26 a week, his oldest son $22, another boy $16, and two girls $10 each—$84 a week. This man and his family were satisfied. Then the union agitators and organizers arrived. Soon after a strike was called. These people loafed for 28 weeks—lost $2,352 in wages. The most that family has made since is $58 a week and as little as $34. What the union did for that family it's done for every workman in that district. . . Personally I say to hell with the union. . .

Your article about the Ford rumpus is disgusting, to say the least. You have exaggerated beyond all common sense. These agitators came to that plant to stir up trouble. . . Your very Rev. Sandford from Chicago in my opinion is just a plain liar. . .

You talk about criminals and gangsters as though the employers had an option on them. The unions are full of them and you know it or should if you know anything. To hell with you and your agitators and organizers. You don't belong in this country. Another load off my chest. Who is paying you for all this baloney anyway, John L. Lewis or Stalin? For fear you might think me a bloated capitalist I'll state I have never drawn over $30 a week in my life but I'm not broke by a damned sight. Kindly take my name off your mailing list. I've had enough.

H. G. WADHAMS

Litchfield, Conn.

Possibly Mr. Wadhams is a bit prejudiced himself; at any rate we do not find his proof of the futility of trade unionism very convincing. Certainly the implied loss of one strike does not change the national picture, which reveals gains by employees in the majority of strikes. And if the textile union were as impotent as Mr. Wadhams indicates, we cannot understand why the mill owners have been fighting so bitterly against unionization, and why so many thousands of southern textile workers have recently become union members.

The figures cited by Mr. Wadhams, in fact, show why a strong labor movement is needed in the south. It is hardly a sound condition when five members of a family, including two girls and a boy, must work to maintain a comfortable home. And when the average weekly wage is cut to $11.60 or even $6.80, the need for collective bargaining seems still more acute.

We have no statistics on the occupational distribution of American gangsters. We do know, from press reports and from statistical surveys, that in practically every labor dispute marked by violence it is the union members who get beaten up or killed.

Although Mr. Wadhams wishes us to understand that his personal opinions are not controlled by dividend checks from Mr. Ford or Mr. Girdler, he finds it hard to realize that CU can also have honest convictions. Strange as it may seem to our Connecticut critic, nobody pays CU a nickel for saying that sweatshop wages are bad for the entire country and that collective bargaining — whether by Mr. Lewis's unions or by Mr. Green's unions—has proved the best method for establishing decent pay.

CU's Index

TO CU: Please don't feel depressed about M.L.'s annoyance at your printing the index to CU *Reports*. The index . . . is necessary for reference purposes. certainly is not "a waste of money and space." I only wish I could send CU more of my money to "waste."

P.S. Articles on "Building Industry" and "Insurance" very good. Labor reports OK.

K.B.

Chicago, Ill.

• • •

TO CU: Don't let M.L. get you too worried about the index. I believe that it is a very useful and necessary part of the publication. Leave it in mine please.

P.E.S.

Stony Point, N. Y.

• • •

TO CU: . . . It does not help you to admit that you have subscribers like M.L. Where an intelligent difference of opinion is possible, present both sides; otherwise ignore M.L.'s advice and similar nonsense. I agree with R.C.L. Your liquor policy and your failure to publish reports on time are indefensible.

W.R.O.

Washington, D. C.

General consensus (the letters above are typical of many) is that the index justifies the space given it and should be continued. We might arrange with M.L. to tear it out of his copy.

Kiddies & Vice

TO CU: In regard to your answer to the gentleman (R.C.L.) who complained of special reports . . . other magazines and newspapers are also used in the schools although they carry ads for liquor and contraceptives. Billboard ads abound. The kiddies are not going to learn an entirely new vice from CU Reports. . . .

Mr. W.A.R. of Washington is laboring under the painfully inaccurate impression that the news in the Washington papers and on the Washington grapevine is more accurate than that in the rest of the country, especially the unintelligent areas west of the Mississippi. If only it were! If only it were accurate any place.

A.W.M.

Windsor, Conn.

The kiddies wouldn't learn any new vice from the *Reports*, but they wouldn't learn anything else either, because the teachers wouldn't show it to them.

Professional Horror

TO CU: As a dentist (recently retired) I want to commend you most heartily for your timely and well worded warning to all and sundry against any and all forms of "power" tooth cleansing apparatus.

My own soul was filled with horror as I read the rash and wholly erroneous statements of the makers of such utterly foolish (and quite possibly *ruinous*) articles.

In a professional experience of half a century it has been . . . my personal observation that . . . the over-fastidious and non-analytical patient can utterly ruin a perfectly good set of teeth and supporting tissues by improper and too frequent and clumsy use of *only the old hand power method!*

You are doing good work all along the line. . . .

DR. A.G.S.

Tryon, N. C.

Consumers Foundation

TO CU: In your January issue you carried a letter stating Mr. Montgomery, Stacy May, and Mrs. Hendrickson had resigned from the Consumers Foundation, also stating that others might join them.

The February issue of the *National Consumer News* carried my name as one of those who had consented to serve on the Council. May I say that I have resigned from the Council.

MRS. J. C. VANDERWOUDE

Dallas, Texas

Evidence which CU has been assembling leaves no doubt of the propagandistic watering of the Consumers Foundation's roots. In time we shall present a complete report to our members on this and kindred examples of "captive" consumer organizations. Meantime, congratulations to Mrs. Vanderwoude for her action.

Senator Copeland's Stand

TO CU: In the Reports for March 1938 you say we should oppose the Wheeler-Lea Bill. If the bill is in favor of the national advertisers why should Senator Copeland, known to be favorable to the patent medicine interests, oppose the bill?

I am enclosing an article which appeared in the New York Times . . . which tells of Senator Copeland's opposition to the Wheeler-Lea Bill. Will you please clarify this seeming discrepancy on your part which makes it seem as if you are on the advertisers' side?

M.H.

New York City

The Food and Drug Administration and the Federal Trade Commission have jockeyed for control of new food and drug legislation ever since the subject came up a few years ago. Senator Copeland has been on the Food and Drug Administration's side of the fence all along; he objected to the Wheeler-Lea Bill because it extended the FTC's control and, incidentally, served to discount the significance of his own bill.

Senator Copeland's stand simply reflected an inter-departmental fight. It carries no more meaning than that because the Senator's bill would not control false advertising any more than the Wheeler-Lea Act will.

No Pet Notion

TO CU: . . . I got a "kick" out of the job of organizing a consumers group . . . I was determined to find out if it was just a pet notion of mine that people are interested in facts dealing with the things they purchase. Now I am convinced. Certainly 37 members may be nothing particularly great to boast of, but considering the times and circumstances, plus my limited time, plus the speed in which I did the job, I feel like saying "not bad." You know it's a tough job collecting union dues right now, let alone venturing into other fields.

M.K.

Steel Workers Organizing Committee, Pittsburgh, Pa.

Let CU join M.K. in saying "not bad;" let CU thank him for a job well done.

Victory Ahead

TO CU: . . . May I add a word of cheer to those men who have despaired of ever ridding the house of the periodic permeations of sulfide depilatories? With the authority of CU as an ally, I think we are now in a position to score a hitherto impossible victory.

D.W.

Washington, D. C.

CU's Binder

TO CU: . . . May I take this opportunity to confirm your hint that all may not have been so well with your binders. In fact mine was positively lousy. I spent 35 minutes and acquired a broken finger nail and a nasty temper trying to work mine the day I received it. It is far too hard to place new copies into, and the screw threads on two of my posts do not seem to fit the screws at all. If that's the best you can do after a supposed careful inspection of the market. . . .

W.F.C.

Wichita, Kansas.

All right, all right, we get the point. Send in your binder, W. F. C., and we'll send you one to keep the temper quiet. Several other members reported they do not like the way the binder operates (though there were several supporters). We still think it's the most reliable type, even if it does take some patience. But we're investigating new ones and may be able to solve all problems by offering more than one type.

Antennas for your Radio

More than 3,600 measurements and tests by CU's technicians disprove the fancy claims of the special models

★

ACCORDING to an official announcement from the Philco Radio and Television Co., the antenna you bought last year should be replaced now, and you needn't expect the new one to be good for more than a year either. The idea is that weather attacks it, the insulation deteriorates, and in a year much of the "original high efficiency" is lost.

Other manufacturers doubt that one year is the maximum life of an aerial. Some suggest simply that it should be "inspected" and, if it shows any signs of deterioration, be replaced.

Actually, a properly installed antenna will last for years, despite the manufacturers' warnings. As a rule, a good antenna remains a good antenna as long as it stays up.

In view of the extensive ballyhoo and the high prices that characterize the numerous special radio antennas on the market, CU's technical staff has carried out a thorough-going investigation into the subject. Laboratory tests have been made on the most widely distributed special brands to determine their relative merits and their superiority, if any, over the old-fashioned single wire with lead-in (the so-called "L-type" antenna). Over 1,200 measurements were made under carefully controlled laboratory conditions, and more than twice that many tests on regular local and distant reception. The results indicate that claims for special-type aerials are grossly exaggerated.

As with many other consumer goods, price was found to bear no consistent relation to performance. Many expensive and complicated special antennas gave poorer results than simple types (including homemade). In some cases the special aerials proved less efficient even than a ground connection without any aerial.

MOST radio dealers sell expensive special aerials with claims for better short-wave reception, less interference, and less noise. Manufacturers of radios offer them to match the set and some (Philco, RCA, etc.) even list their sets as "sold only with antenna, $5 extra." The buyer who has an antenna already is told that it's probably "worn out" or obsolete, and doesn't match the new set anyway. You can avoid the extra charge if you're firm: say you won't buy the set at all.

The most important of the special claims is that noise is reduced by virtue of special lead-ins which act simply as transmission lines from antenna to set and pick up no noise themselves.

Actually, the lead-ins supplied with the noise-reducing antennas do pick up noise, although less than an ordinary single wire. And secondly, volume is reduced en route from antenna to set, mainly through losses in the couplers and lead-in. Furthermore, many noise impulses carry for considerable distances and affect the antenna itself; *e. g.*, automobile-ignition interference, radiations from neon signs, violet-ray machines, x-ray equipment, and oil burner ignition circuits. Radiation from diathermy machines may carry for hundreds of miles.

A noise-reducing antenna system is ineffective against all such strong interference, or against natural static. No antenna system practical for the layman will reduce true static.

And, because of the losses mentioned above, the volume control must be turned up further, increasing the noises inherent in the receiver itself and, thereby, the effective noise level. In only 5 per cent of all comparisons made was the volume with a special antenna as great as with the simple L antenna.

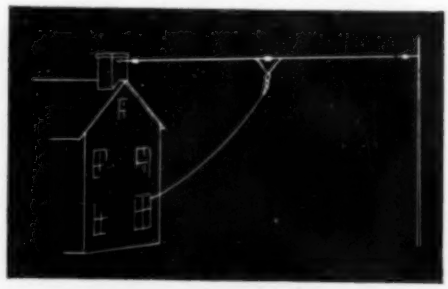
THE second important claim made for the special antenna systems is that they give better short-wave performance. CU's tests indicated that, although in a few cases the special outfits were better than the simple L at one or two specific wavelengths, none of them gave better performance than the L on all the bands used for the tests. Tests were made in all cases on the broadcast band, and at 10, 20, 25, 30, and 50 meters (30, 15, 12, 10, and 6 megacycles, respectively).

It follows that in many cases the L-type antenna (or T-type, if the lead-in is connected to the center rather than to one end) will give better results than a special noise-reducing type. This was found particularly true at wavelengths below 20 meters. Although there are some locations where a special doublet antenna (see illustration) with a two-wire lead-in is desirable for noise reduction, one need be installed only after an L proves unsatisfactory.

In any event, the radio enthusiast

SIMPLE L-TYPE ANTENNA

Best for broadcast and shortwave in most locations. Parts should cost less than $1.



SIMPLE DOUBLET TYPE

May be better than L-type at certain wave-lengths. Parts should cost less than $2.

should never assume that a special antenna is preferable until he has compared it with an L. He should also try a simple "antenna eliminator"—that is, disconnect the aerial, connect the ground to the antenna post, and leave the ground post, if any, free. The ground connection should be made with the power plug pulled out.

Most commercial antenna eliminators either connect the antenna post through a condenser to one side of the power line (using that as the aerial) or else connect the antenna post to the ground, in which case the receiver is operated without a ground connection. Both of these systems are effective in electrically quiet locations; often, above 25 meters, as good as or better than an L antenna. On shorter wavelengths their efficiency falls off rapidly. The so-called "filters" often included in antenna eliminators to reduce noise usually employ condensers too small for any appreciable filtering action. None of these eliminators is considered acceptable.

While doublet antennas will give slightly better reception from stations located at right angles to them, and the L-type from stations toward the lead-in end, these directional characteristics are relatively unimportant to the average listener. The apparent direction from which signals arrive—particularly short-wave signals—occasionally changes rapidly. Erecting the aerial high and in the open, if possible, is more important for good reception.

If You Want To Experiment . . .

Some notes on construction and home testing

THE common L-type antenna should be as long as possible, up to about fifty feet including the lead-in. With a modern receiver little will be gained by greater length *unless the antenna can at the same time be raised to greater height* (the higher the better). It should be in the open, and preferably at right angles to power and trolley lines. Except in buildings of steel construction, a single-wire indoor antenna will often be just as effective as an out-of-door one.

More wires or a "cage" will not improve reception. Also, fifty feet of wire doubled back and forth over a 10-foot space remains, in effect, a *10-foot* antenna. On some wave bands the L antenna may work better with a ground connection, on others without.

Any convenient copper wire, bare or insulated, solid or stranded, preferably not smaller than No. 18 or its equivalent, can be used. The regular antenna wire sold in 5-and-10 cent stores is probably the best buy, and the cheaper grades are usually satisfactory. It is desirable but not essential that all joints be soldered; in any event make them tight. Joints may be avoided by using a single wire for antenna and lead-in.

If you decide that a doublet or other noise-reducing antenna is desirable, you can make one yourself easily and much more cheaply than you can purchase it in ready-wired kit form. Three insulators will be needed—one for each end of the wire and one for the center. (CU tests showed excellent results on antennas without the antenna coupler often supplied with commercial kits.)

It is not essential that the two halves (legs) of the doublet be the same length. Also, one end of the antenna can be higher than the other. Total length is more or less immaterial for all-wave reception; commercial kits supply from 40 to 100 feet of wire. For best reception at a particular wavelength, however, each leg should be equal to 95% of one quarter of the wavelength —*e. g.*, for 40 meters each leg should be 9.5 meters or 31.2 feet long. (Such an antenna will, of course, also function satisfactorily at other wavelengths.)

Best results will be secured if the two wires of the lead-in are spaced about three inches apart. Ordinary insulators can be used every three feet or so for spacers. Special "transposition blocks" which cross the wires over, are more convenient for spacing but make no appreciable difference in performance.

An antenna with this type of lead-in requires no set coupler; it works best if there are special posts or wires on the receiver for a doublet antenna. Such an antenna was the most effective of the special arrangements tested by CU, being highly efficient on all wavelengths—better than the L in several instances, especially on 10 meters.

If more convenient, parallel or twisted lamp cord can be used for the lead-in with only slightly less satisfactory results. Special "transmission line" is not necessary. Make the lead-in as short as possible.

The lamp cord lead-in usually, but by no means always, requires a set coupling transformer for best results (25c and up from most radio supply houses). A satisfactory coupler can be made with 20 feet or less of any insulated wire between No. 22 and No. 30. Wind two coils on a 1½-inch cylinder —ten turns for one coil and twenty turns for the other. Slip the coils off, tie into two circular bundles and then tie the two together so as to make one large circular bundle. The antenna connects to the 10-turn coil and the receiver to the 20-turn coil.

While the manufacturer's instructions may be followed in installing an aerial, you should try out various connections to secure best performance with either an assembled or a homemade antenna. Instructions often state, for instance, that the whole length of the supplied lead-in be used—the surplus being wound into a coil. Particularly on shorter wavelengths, results may be better if the lead-in is cut short. All possible ways of connecting the lead-in to the receiver should be tried out—with and without a coupler and with and without a ground connection. Try also connecting the two antenna posts of the receiver together, both with and without ground connection. These tests should be made on all bands. You will eventually discover a connection that gives best results on the band you want and, likely as not, it will differ from the manufacturer's instructions.

A lightning arrester is required by many local wiring codes and by many fire insurance policies. Buy the cheapest one you can find that carries the Underwriters' Laboratories' approval. Check also to make sure that your installation follows other requirements of your local wiring code.

(Ratings on next page)

Antennas & Antenna Kits

Net prices given below are approximately those charged by mail-order houses such as Wholesale Radio Service Co., NYC, or Allied Radio Corp., Chicago. Much the same prices will apply in most cases over the counter at large radio parts stores. Installation is extra in all cases.

Best Buys

L-Type. Homemade from 5-and-10 cent store parts or kits available for 50c to $1; most satisfactory for general performance unless there is a special noise problem.

Homemade Doublet Type (see text), when the L-type is unsatisfactory because of noise and when you have time to bother making it.

Lafayette "Economy" All-Wave Kit Cat. No. K16480 (Wholesale Radio Service Co., NYC). 97c plus postage. Supplied without coupler. With any of the couplers listed below, it provides a convenient and inexpensive antenna for those who wish to experiment with the doublet type.

Ward's Cat. No. —7031, spring-summer '38 (Montgomery Ward). $2.19 plus postage. Best general performance of the readymade kit antennas. Coupler has a switch which improves performance on some bands. 10-meter performance good.

Also Acceptable

The following antennas were found inferior in general performance to the L-type, but may give better performance on particular wavelengths, especially in electrically noisy locations. They are recommended only where the L has proved definitely unsatisfactory.

Belden All-Wave Doublet No. 8917 (Belden Mfg. Co., Chicago). Listed at $7.25; net $4.20. He a switch to convert the doublet more or less into a T antenna for broadcast band and a variable condenser which has no effect. The coupler is poorly constructed. Second-best kit in general performance.

Birco—Birnbach All-Wave "Ready" Aerial Kit (Birnbach Radio Co., NYC). Listed at $4.25; net $2.49. Doublet-type antenna with legs of unequal length; no apparent gain is contributed by this design. Effective noise reduction poor on short waves.

Belden Double Doublet No. 8912. Listed at $7.70; net $4.49. Identical with *Belden* No. 8917, except that it combines two different size doublets, claimed to provide better all-wave performance. General performance, however, was found poorer than that of No. 8917 above.

RCA Spider Web (RCA Mfg. Corp., Camden, N. J.). Listed at $8.95; net $5.37. An antenna of complicated design with only average performance when installed as directed. (Test performance was improved somewhat by shortening lead-in.) Fairly good at 20 and at 30 meters. A difficult aerial to install.

Philco (Philco Radio and Television Corp., Philadelphia). Listed at $5. Noise reduction slight except at 30 meters, but volume comparatively good. Very poor at 10 meters.

Not Acceptable

The following antennas were found much inferior to the simple L antenna in general performance, both in pick-up and in noise reduction.

Silvertone De Luxe Doublet Cat. No. —5571, spring-summer '38 (Sears, Roebuck). $3.59 plus postage. Relatively poor pick-up and poor noise reduction.

RCA Magic Wave No. 9812. Listed at $6.95; net $4.17. Effective noise reduction poor, with poor pick-up on broadcast band. With two extra couplers ($3.30 net) an additional receiver can be operated from the same antenna. According to claims, as high as 16 radios can be so operated. On test, the first additional receiver dropped the signal strength 50%.

Noise-master No. 14 (Cornish Wire Co., NYC). Listed at $6.75; net $3.97. Very poor pick-up and poor noise reduction on short waves. Additional receivers can be used with this kit by purchasing extra set couplers. The loss when operating two receivers was considerably less than that experienced with the *RCA Magic Wave.*

RCA 395. Listed at $3.95; net $2.37. Relatively poor pick-up and on some bands poor noise reduction. Very poor reception on 10 meters.

GE (General Electric Co., Bridgeport, Conn.). Listed at $5. Effective noise reduction negligible on all bands, and generally poor pick-up on short waves. With lead-in cut short, it worked well on 10 meters.

Communications-Type Receivers

A Special Report

CONSUMERS UNION has prepared a detailed report on the special "communications-type" receivers listed briefly in the article on 1938 radios in the December *Reports.* The new study covers the various features offered by these receivers and discusses the various models in terms of their desirability for such different services as short-wave broadcast reception and amateur communications work. In addition there are ratings of several models not previously covered. The report is available to any CU member for 25c.

Antenna Eliminators

These are typical of the innumerable gadgets claimed to do away with aerials and at the same time improve reception. See text for ways to make your own at negligible cost.

Not Acceptable

Philmore Noise and Aerial Eliminator (Philmore Mfg. Co.). 33c. Same as *Ajax Noise and Aerial Eliminator.* 20c. Metal case connects antenna post of receiver to ground. Condenser across power line. (.1 mfd) too small for filtering action.

No-Tenna (Tobe Deutschmann Corp.). 59c. In effect, grounds the antenna post through a small condenser. Wire connecting to ground post was knotted inside (so that it wouldn't pull out) and connected to nothing at all. Worked equally well with the condenser short-circuited.

Antennatrol No. 4394 (Insuline Corp. of America.) 59c. Works best when so adjusted that the antenna post of the set is grounded. 10c stores sell a flimsy version of this for 20c; same rating.

I. C. A. Dynatrol (Insuline Corp. of America). 88c. A plug-in arrange-

ment to use the a-c line as an aerial. Claims of line filter for noises exaggerated. May produce hum in the receiver.

Freak Antennas

Freak antennas such as the metal-globe, spiral-coil, and broom types are all "Not Acceptable." Pseudo-technical claims for the performance of such gadgets are without foundation. Most of the effect comes from the lead-in wire and not from the "antenna" itself. Noise reduction is therefore impossible. The following are typical:

Not Acceptable

Knox All-Directional Aerial (Knox Porcelain Co., Knoxville, Tenn.). Listed at $2.75. Broom type; supposed to be all-directional because the broom of wires at the end can be spread to point in all directions. Claims for improved performance have no justification.

Twombly Radiomast (Evans-Walton Co., Detroit). Listed at $5. Spiral-coil type with "over 250 feet of antenna wire" wound around a 6-foot pole. A piece of wire 6 feet long proved just as good.

Set Couplers

These couplers are used to connect a low-impedance (lamp-cord type) lead-in to the receiver. Order is that of overall performance on test.

Acceptable

Homemade coupler described in the text. Requires 5c to 10c worth of wire. General performance superior to that of any below.

Meissner NY 202 Antenna Coupler (Meissner Mfg. Co., Mt. Carmel, Ill.; Wholesale Radio Service Cat. No. K 17082). 29c plus postage. Open-coil unit (no case).

Lafayette All-Wave Coupler Cat. No. K 17172 (Wholesale Radio Service Co.). 59c plus postage. An efficient unit enclosed in a case.

Universal Coupler-Type 6826 (Meissner Mfg. Co.; Wholesale Radio Service Cat. No. K 17078). 49c plus postage. Has switch for changing from broadcast to short waves. This affords some elasticity.

Building Materials

A combination of stone, stucco, wood siding and wood half timbering. Expensive in first cost, more costly to maintain than a single material. The half timbering once had a structural function; now it's worn-out "ornament."

Fourth in a series of articles for CU by Albert Mayer, architect and housing authority

★

A GOOD building principle is to select your structure, materials, finishes and mechanical systems on the basis of what is customarily handled in your locality. As a rule this will be cheapest, the contractors and mechanics will probably make a better job of installation because they are more accustomed to them, and you will be able quickly to get anything you may run short of while building or when replacement is necessary.

If you use something new, make sure it's the kind of thing that local people are capable of handling. Avoid such items as special trims, special tile, special paint colors that are difficult to match. Use stock window and door sizes; try to have room size and house size utilize stock length timbers.

What might be allowable in a house at one price should often be viewed with suspicion in one at a higher price. For instance, select oak floors are certainly acceptable in a $5,000 house; in a $12,000 house you should get clear oak. In the cheaper house you would expect to find plated hardware on the interior; in the other, it would be evidence of skimping.

Finally, have your plans, elevations and specifications examined by your prospective mortgagee. His advice may be good. In any case he controls the money, and you'd better do your arguing beforehand than after starting construction, when it may be too late. Check your deed restrictions to see whether you need the approval of the developer or of a committee, on materials or construction.

Structure & Structural Materials

THE function of structure is to support the house, its contents and the people in it, and to resist wind pressure—that is, to keep the house from collapsing. In these essentials any type of structure as normally built is adequate on completion. The difficulties that arise are those *related* to structure, and to its impermanence—plaster cracks, uneven floors, squeak-

ing stairs, structural disintegration, fire danger, condensation, leaks—resulting at the least in high maintenance costs and irritation.

Among the causes are settling, shrinkage, sagging of structural members, decay, dry rot, termites, porous masonry, etc. Some of the causes may be present in any structural system; none need be. Again it is a question of how carefully the work is designed and carried out.

Houses are generally built by one of two systems. Over 90 per cent are wood frame. Most of the others are masonry. In the former the floors and roof are held up by exterior wall uprights called studs, generally measuring 2"x4" and spaced 16" apart on centers, tied together by wall sheathing boards, by floor joists and underflooring. After the sheathing has been covered with waterproof paper, the exterior is applied—wood siding, stucco, shingles—or brick or stone veneer is anchored into the structure.

In the masonry house the exterior walls are of solid masonry supporting floors and roof. In all cases, except for certain prefabricated houses, the floor system and the interior partitions are of wood.

Costs—by Materials

THE figures below, based on a hypothetical 6-room house costing $5000 if built of wood clapboards, show approximate cost variations for alternative types of construction or materials in the New York Metropolitan Area. For a larger house, the differences would be greater. In other sections, you will probably get more house for your money, but *differences* will not vary much, except as some particular material may be particularly cheap in certain localities.

All houses built of masonry are figured as furred to supply air space between exterior wall and interior finish. Brick walls are figured on the basis of selected common brick exterior.

FRAME	TOTAL COST
Wood Clapboards	$5000
Stucco	5100
Wood Shingles	5150
Asbestos Siding	5300
Asbestos Shingles	5400
Brick Veneer	5550

MASONRY	TOTAL COST
Concrete Block 8" Painted	$5300
Rubble Stone 12" thick	5500
Terra Cotta or Concrete Block 8" Stuccoed	5600
Solid Brick 8" thick	6000

Most people think the brick or stone masonry house is more substantial and durable than a frame house. While one built of masonry and steel *throughout* would certainly be, the cost of that would be prohibitive. The ordinary masonry house has some points of superiority (greater fire resistance and higher resale value), but the frame house is cheaper and if well built is equally serviceable.

Generally the fire insurance rates are not sufficiently lower for masonry to cut much figure, though this should be checked. Masonry's fire safety applies mostly to fires originating on the outside, and there the fireproof qualities of the roof are more important.

Higher resale value is mainly a psychological factor, but is also due to slower depreciation. A house with masonry exterior has somewhat lower maintenance cost than one of painted wood, but again not as much as generally supposed.

Disadvantages of masonry construction are that floors settle irregularly causing cracks (due to the fact that wood shrinks and masonry doesn't); that it's harder to make weatherproof; that it takes longer to dry out after construction. The frame house with brick or stone veneer has most of masonry's advantages, eliminates some of the disadvantages, and is cheaper.

No system of construction is guarantee against troubles; any one well done can give good satisfaction. The precautions cost little; their neglect may be costly out of all proportion. For example, termite-proofing costs less than a hundred dollars for metal shields, while repairing damage by termites later can cost many hundreds of dollars.

Foundations

THE function of the foundation is to keep the house at a fixed level at every point (because the upper structure doesn't itself have sufficient rigidity) and, in many cases, to act as a retaining wall. For a good foundation, three rules must be followed:

1. It must rest on solid ground. If the ground has been filled or disturbed, you must excavate below it to original earth.

2. It must extend below the frost line. Above that the ground moves up and down with temperature changes, and will heave or crack the foundations. The frost line varies from a 4′ depth in the north to 1½′ in the south. Consult your Weather Bureau.

3. Foundations and footings (bases for the foundation) must be of sufficient size and strength. They must rest on an adequate area of soil in proportion to the soil's bearing capacity and the load on it.

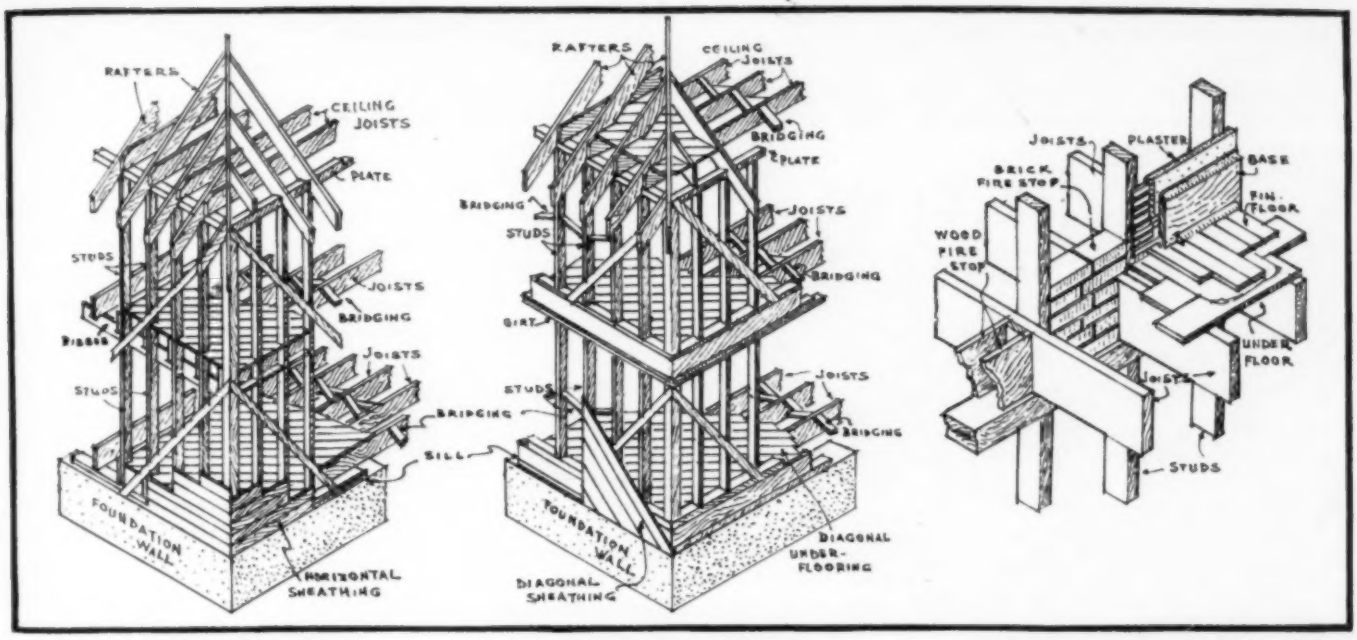
Generally the interior footings supporting columns are the big offenders. Each one often supports one-sixth to one-quarter of the weight of the house, but usually is inadequate compared to wall footings. The center thus settles more than the outside walls, causing uneven floors, cracks in plaster and at base boards. Footings should be of concrete, not leaner than 1 part cement, 2½ parts sand, 5 parts gravel. As you or even the architect can scarcely watch every batch of concrete mixed, your best assurance here again is a reputable builder. FHA has worked out a useful guide of minimum footing and foundation sizes for ordinary conditions.[1]

[1] See "Minimum Construction Requirements for New Dwellings," issued separately for each locality. Get it from the FHA district office nearest you.

Costs—by Sections

THE figures below show approximate geographical variations in building costs, as of the beginning of 1938. The per cent figures can be applied to the cost figures for alternative materials, as given across the page, to provide an idea of what those costs would be in your locality. Like all other cost data in the building industry, these figures give you only a very rough preliminary guide.

LOCALITY	COST	FACTOR
New York City	$5000	100%
Atlanta	4300	86
Baltimore	4450	89
Birmingham	3750	75
Boston	4800	96
Chicago	4900	98
Cincinnati	4250	85
Cleveland	4650	93
Dallas	4100	82
Denver	4650	93
Detroit	4300	86
Kansas City	4300	86
Los Angeles	4300	86
Minneapolis	4100	82
New Orleans	3900	78
Philadelphia	4550	91
Pittsburgh	4650	93
St. Louis	4450	89
San Francisco	4100	82
Seattle	3850	77



BALLOON FRAMING **PLATFORM FRAMING** **FIRE STOPPING: TWO METHODS**

Balloon framing minimizes wood's shrinkage; platform framing equalizes it (see text). Horizontal or diagonal sheathing may be used with either. Diagonal is superior and its extra cost so slight that many builders do not even figure it.

Among fire precautions proper fire stopping is more important than any save proper chimney construction.

Framing

THOUGH frame construction has been the almost universal method since the beginning of our history, there is little uniformity in it even now, due mainly to the fact that it has grown out of independent local craft traditions. There are three main methods—the "braced" frame, the "platform" or Western, the "balloon"—and innumerable combinations. It is hard to say which is best. Mainly it's a question of how consistently any of the methods is carried through so as to retain its advantages.

Wood has many virtues as a building material: it is strong yet light to handle, easy to cut and fit, easy to obtain, relatively cheap. Its main drawback is that it shrinks, because in its natural state it contains much water. Even when properly seasoned it shrinks normally as much as one-twentieth. Such shrinkage is generally across the grain (in thickness, not in length). It affects mainly the vertical dimension of the house.

The balloon system minimizes this shrinkage by supporting each floor on a continuous upright stud, which doesn't shrink vertically. The platform system doesn't try to minimize shrinkage but to equalize it, each floor's studs supported on floor joists of the same thickness, hence with equal shrinkage.

With well-seasoned lumber, either system works pretty well. Difficulty arises when the systems are mixed; for example, when the exterior walls follow the balloon or minimal-shrinkage system, and the interior bearing partitions are on the platform plan. For the masonry house or the brick veneer or stucco house—that is, whenever non-shrinking materials are used—the balloon frame with its minimum shrinkage is preferable. For the masonry house it is better still to have floors supported by interior steel pipe columns and "junior" steel beams.

Undersized or too widely spaced structural members, and improper framing around large wall and floor openings, will mean excessive springiness in floors, excessive sag over wide windows, along with plaster cracks, etc. Proper design will avoid these consequences, provided there is close supervision to see that the design is lived up to (framing is quickly enclosed and the results may not appear for some time). It is not only a question of joists adequately sized and spaced, and properly doubled headers around stairs and under windows (see FHA Minimum Standards pamphlet) but also of seeing that timbers haven't been improperly cut away to make room for pipes.

Decay, Rot, Termites

THE damage from these sources is costly to repair, because it is frequently not visible until it has reached major proportions. Decay and dry rot arise from the presence of too much moisture. Precautions to use:

1. Wood properly seasoned when purchased and delivered, and properly stored off the ground in a dry, ventilated space until used.

2. No wood in contact with the soil or completely surrounded by masonry. Sills should be 8″ above grade, porch posts on masonry above ground.[2]

3. Cellars, unexcavated spaces beneath wood floors, and attics adequately ventilated.

4. Watertight construction.

5. No plastering in freezing weather, when moisture may be driven into the walls. Winter humidification systems should not be operated until plaster has thoroughly dried.

[2] In addition, certain woods naturally resist decay better than others. If you want to know more about this, and generally what woods may be used where for structure and finish, see Bureau of Standards Circular #70, "Materials for the Household" (pages 60-62).

Termite protection requires, in addition, that foundation walls be tightly built and capped with a metal shield covering the top, extending 2″ out from face of wall on both sides, and soldered at all seams. In an infected house, termite nests must be destroyed, the timbers repaired or replaced, and such a shield installed.

Beware of experts who claim to eradicate termites with chemical sprays, etc. Really effective preservative treatment is so expensive as to be practically out of the question.

Safety: Fire

NO HOUSE is entirely fireproof. The problem is to prevent fires from starting and spreading. By proper precautions the frame house can be made highly fire resistant.

Fires generally start in chimneys, near fireplaces, at ranges, near the heating plant, in the garage or in bad wiring. Spread is most rapid through vertical openings. The best guarantee against fire is a well-built chimney with proper flue connections.

Chimneys should be continuously lined with terra cotta flue lining, with mortar sealed joints surrounded by solid masonry. They should project at least 2′ above any roof to avoid backdrafts. Boiler and stove connections should be of heavy metal and should clear wood members by one foot; metal should not be allowed to rust. A spark arrester at the top of the chimney is a good thing. Wood framing should clear the chimney by 2″ and should never be supported by the chimney.

Ceiling of the boiler room, walls and ceiling of attached garage, should be protected with metal lath and plaster or with fire-resistant board with joints sealed. Communicating doors should be fireproof and self-closing.

Partitions behind ranges should be filled to ceiling with masonry; no wood cabinets should be above or within 1′ of range unless properly insulated.

To prevent the spread of fire once started, fire stopping should be provided between vertical studs at all floors and at roof, which eliminates "flue action."

A fire underwriters' certificate, which assures safety of electric wiring, should be obtained.

Safety: Accident

AVOID steep stairs, including cellar stairs (laundry basket!); avoid stairs with winders. Small differences in level (as in dropped living rooms) are dangerous, especially for babies. Hall and porch rails should not permit babies to wriggle through. Low window sills are dangerous especially at night. Carpets in the baby's room, and scatter rugs anywhere are troublesome.[3] Glass-enclosed shower over a tub is potentially dangerous if you slip.

Exterior Wall Finish Materials

WE SHALL consider brick, stone, concrete block masonry; brick and stone veneer; wood siding and shingles; asbestos siding and shingles; stucco; miscellaneous. In addition to the basic general criteria of appearance, durability and low maintenance cost, we must consider freedom from warping and decay, weathertightness, heat transmission and insulability.

There is no room here to discuss appearance except in flagrant cases—but on all counts avoid trick mixing of materials, *e. g.*, stone, stucco, half timbering. It costs more, the appearance is restless, maintenance costs are higher due to differential expansion and to extra care required in painting different materials without spattering. As to durability, any of the materials discussed will, properly installed and maintained, last several generations.

Masonry. Transmits heat more easily, is harder to insulate and to make weathertight. More durable. Somewhat lower maintenance cost when properly built. Cost of brickwork varies with first cost of brick and with type of bond and mortar joint and with coloring of joint. The same comments apply to masonry veneers, except that they are easier to make weathertight and to insulate. The concrete block house is the only one of masonry that compares favorably in cost with wood frame. A masonry variation is provided in the Flagg system—stone veneer acting as a form for 4″ poured concrete behind. It is said to be cheaper than regular stone veneer.

Wood Siding and Shingles. When painted, maintenance cost is higher than for other materials. When oil stained, maintenance cost is decidedly lowered—the treatment need be renewed only once in 6 to 8 years. Woods such as cedar, redwood, or cypress need neither paint nor stain if the color of their natural weathering appeals to you.

Asbestos Siding and Shingles. Requires no painting or maintenance; like masonry veneer, it resists fires originating outside.

Cement Stucco. As stucco has no flexibility, it requires a rigid frame—either solid masonry or balloon wood frame braced at corners (to avoid shrinkage, as stucco cracks when shrinkage of its base takes place). It must be stopped above ground because water sucked up by capillary action will get behind, freeze and tend to crack off the stucco.

Stucco requires careful preparation of base, careful workmanship, and care and experience in drying and curing. A good finish with very low maintenance when skilfully and conscientiously applied; but a not entirely satisfactory human equation results in more trouble than accompanies other finishes. Hard to patch. Resists fires of external origin.

Miscellaneous. Fiber boards such as Homasote or Celotex have been used on the exteriors of houses and have stood up for some years. Plywood—large panels of wood veneers glued together under pressure with the grains of alternate layers at right angles to each other—can be used as an exterior finish if waterproof phenol resin glue is used in their manufacture. With either fireboard or plywood the back and edges must be water-sealed and the joints caulked where the panels meet to assure watertightness. Such finishes (though not stocked regularly by all dealers) can in many cases be installed more cheaply than wood siding; none, of course, can show the latter's hundreds of years of use experience.

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(*This is the fourth of a series of articles on the problems of building or buying a house. The next article will discuss interior materials and finishes.*)

[3] For further items, especially precautions in day-to-day habits, see "How Safe Is Home?" published by the Metropolitan Life Insurance Co.; or the much more extensive "Safety for the Household," issued by the Bureau of Standards.

(*Continued from page 2*)

to have a strong consumers cooperative movement. In the days after Hitler's arrival sentries were posted at the doors of cooperative stores. Some time later the Nazis closed seventy separate societies, including several of the biggest in Germany.

The German as worker, denied the right to organize, is prevented by law from getting a wage increase. Meantime, the German as consumer must pay higher prices for less and poorer goods. Last year, a recent article in the *Nation* points out, the price index of manufactured consumer goods moved up from 130.5 to 135.8. Wages do not move up in Germany.

III

But can it happen here? Most emphatically it can. We don't say it will. But there is simply no sound reason to indicate that it cannot. America's insularity passed with the development of modern mechanics, international investments, and the fine art of propaganda. Interestingly enough, the U. S. does more financing in Germany than in any other European country.

Fascism has already shown its ability to cross the water. In several of our sister republics to the south it has taken root and in more than one it has had its first flowering. In Mexico extensive preparations for a fascist coup d'etat have been disclosed. In a recent series of articles the New York *Post* roughed out the mushrooming fascist organizations in Canada.

Thus the trend of things around us—not in Europe, but up against our own borders. It is something to think about. And when you have thought about it, consider what has been happening *within* the borders.

Two years ago the LaFollette Committee began its investigations. Since then it has been steadily unearthing instances of industrial terrorism and vigilantism (fascism in plain clothes) so outrageous in their violation of human rights that Hitler and Mussolini themselves would view them approvingly.

As the United States stands revealed in the LaFollette reports, fascism here is not only possible; it is flourishing. There is, of course, vastly more to American life than is contained in the sorry tale told in those reports. There are powerful bulwarks of democratic procedure and progressive thinking. And against them fascist procedure and thinking has not yet by any means prevailed. But it is making its dent; and it is stronger than it was.

And the Nazis have contributed a section of the world's most highly-geared propaganda machine to help along.

In a book published last year, Robert A. Brady, professor of economics at the University of California and chairman of CU's newly-formed Western division, described in fine detail the workings of Nazism, with a special emphasis on the deadly damage it has done to standards of income and consumption of the German people.[1] In a book published this month, George Seldes, author, correspondent, and a sponsor of CU, presents a graphic picture of the growth of fascist activities in the U. S., with an added section touching on their kinship to the fascist forces of Europe.[2]

What emerges from both of these books—and from many others on the same and similar subjects—is that the threat of fascism is appallingly real in our own country, that understanding of its workings and ceaseless vigilance to uproot them are essential to stop it.

Here's a case in point. On the West Coast recently an organization calling itself The Neutral Thousands got started. It was a semi-fascist, vigilante outfit appealing to housewives as consumers, campaigning to get them to join up against organized labor. It made headway for a while because it represented itself as an independent, impartial friend of labor, capital, the consumer and all "right-thinking" people (a favorite fascist device). Now it has fallen on troubled days. It has fallen because bona fide labor and consumer organizations—suspicious of it—investigated, discovered, and made known its connections with California business groups who were using it as an anti-labor tool.

There will, of course, be more such organized efforts on the part of fascist-minded groups to undermine labor, lull the consumer, and waylay progressive energy. They must be found out and exposed.

IV

We wanted to say a few words about fascism, and the few words have taken quite a space. There's a great deal more that could be said. But we have said enough to make our stand clear, to show why we think fascism is necessarily a major concern of organized consumers.

We do not mean by this that CU is planning to plunge into politics, or turn the *Reports* into a journal of political opinion. CU was set up as a technical organization, to "give information and assistance on all matters relating to the expenditure of earnings and the family income." And CU's efforts will continue squarely along the lines thus laid out.

But it is also stated in CU's charter that the organization is intended "to initiate, to cooperate with, and to aid individual and group efforts of whatever nature and description seeking to create and maintain decent living standards for ultimate consumers."

Our support of organized labor is an expression of this phase of CU's work. And whatever support we can give to the increasingly important fight against fascism seems to us a further expression of the same purpose.

Consumers Union has, of course, a very personal feeling in this matter. For if fascism takes hold in America, goodbye CU—along with all trade unions, all consumer cooperatives, all liberal organizations, all liberty of thought and action. Meanwhile, we intend to fight it and all its workings as effectively as we know how. We urge Consumer A and Consumer B to join us.

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[1] "The Spirit and Structure of German Fascism," by Robert A. Brady; Viking Press, New York; $3.

[2] "You Can't Do That," by George Seldes; Modern Age Books, Inc., New York; 50c.

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Consumers Union's own staff of technicians conducts many of the laboratory tests and investigations on which the ratings of products given in the *Reports* are based. The greater part of the testing, however, is done by Consumers Union's group of consultants—more than 200 specialists selected for their competence and freedom from commercial bias—in university, governmental and private laboratories.

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